

THE NEW WORLD OF TO-DAY

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CAMPING IN THE CANADIAN ROCKIES

THE NEW WORLD OF TO-DAY

By

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With Economic Data supplied by

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The Edinburgh Geographical Institute

VOLUME III

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THE GRESHAM PUBLISHING COMPANY LTD.

66 Chandos Street, Covent Garden, London

1921

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MAPS IN COLOUR

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NORTH AMERICA

INTRODUCTION

What we know best about North America, extending from the Arctic icefields to the warm sea whose islands were mistakenly named the West Indies, is its being mainly overlaid by a population of our own blood and speech. Spain, indeed, made attempts here at the blighting conquest and imperfect civilization she spread over a great part of South America. Of her expeditions sent out towards California, in search of the gold which was to be discovered three centuries later, the most celebrated is that led by Ferdinand de Soto, that wandered deviously through the interior north of the Gulf of Mexico, and left its leader buried in the waters of the Mississippi. Till recent times the Spaniards kept a feeble hold on the south and the far west of a region they claimed as their own; yet, fearless in romantic perils and wild delusions, they shrank back from colder regions that were to be won by the plough and the axe rather than the sword. In the far north France entered this wide field, and established her sway along the St. Lawrence and its great lakes. Other nations made settlements on the coast; but of their pains in clearing and planting, the fruit was reaped by one people that has been masterfully reproducing itself across the Atlantic, as did Greece on the shores of Asia Minor—the race which, for want of a more comprehensive name, can be called Anglo-Saxon, and which here rejects the name of British, while it keeps the tongue of

stock established, so rapidly in most parts has it absorbed alien elements, that a Briton can look on North America as less foreign than France or Spain, though he himself be held a foreigner in the greatest American country.

The two Americas, so different in many respects, offer a contrast flattering to our pride of blood. The Latin races, who were first in the field of modern colonization, have, as a rule, failed to profit by their early enterprise. Spain claimed a monopoly of luxuriant regions, where her eager adventurers sought, not always in vain, for the gold and silver that bedecked naked Indians. But all the mines of Mexico and Peru brought no strength to their masters, when the life was sucked out of Spain by tyranny and superstition. Her colonists did little good to the rich lands they overran, while they often let themselves be debased among the native races wasted and withered by their selfish oppression. Her vast and ill-governed provinces, revolting against the Motherland, fell into ignorant poverty and contemptible slavery under the dictators imposed on them by chronic revolutions. Some of those turbulent republics, that now begin to show signs of prosperity and progress, owe such improvement largely to foreign capital, enterprise, and immigration. On the other hand, the American colonies of Britain were more often planted on inhospitable shores and uninviting soil. For their portion, her settlers

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Palms on the Colorado Desert, Southern California

Pierce, Los Angeles

stern climates, against warlike natives; by industry, perseverance, pluck, and resourcefulness they turned forests and swamps into farms and towns, till they had covered a vast continent with fresh shoots of vigorous life, thriving under a rule of law, like true scions of the island-people that has so widely changed the face of the earth.

North America, including Mexico, is the larger of the two western continents. It contains from eight to nine millions of square miles, a calculation made a little vague by the icy wilds of the Arctic region. It has a population of well over a hundred millions, fast increasing, most thickly gathered in the centre to the south of the Great Lakes. Its coast line is more broken and irregular than that of South America, which it resembles in its high mountain ranges and great river basins. The counterpart of the Andes is the long Rocky Moun-

tain system of chains, peaks, elevated plateaux and basins, not quite so high on the whole, but with several points over 15,000 feet. To the west of this, the Pacific is bordered by a coast range, or usually by parallel ranges often in height little short of the central mass. The eastern side is roughened by the lower mass of the Alleghanies, outside of which lies the Atlantic coast plain. Between these two systems extends the vast central basin mainly drained by the Mississippi and the Missouri southward, and northward by the rivers of the Arctic Ocean. Their headwaters flow from a low transverse ridge that makes the watershed of long streams running to tropical and to frozen seas, while one river, the St. Lawrence, spreading out through the greatest lake chain of the world, carries its waters north-eastward to the Atlantic.

The climate of this continent ranges,

according to latitude and altitude, from the sweltering swamps of the Gulf of Mexico to rocky deserts confused with the Polar ice. In a central tract, lying opposite Spain, the mean annual temperature is that of the British Islands, but divided between more violent extremes, where in summer panting citizens are struck down by intolerable heat waves, and in winter the hurricanes of whirling snow called blizzards may prove deadlier than the sand-blasts of the Sahara. The west coast is more mild and genial than the east, some parts of which suffer from an intensified severity of cold sharpened by fluctuations as in our own experience; but, generally speaking, cold and heat are more lasting in their incidence, so that people at least know what to depend on. The rainfall has an irregular distribution, due to the mountain walls that intercept it: on some coast regions it may be more than twice England's average, while much of the centre is so dry that agriculture requires artificial irrigation, and one great tract between the Rocky Mountains and the Pacific Coast Range is a hopeless desert, caked with blighting alkalis, or at the best covered over enormous areas with dusty cactus and the dreary "sage-bush" that has been compared* to a mildewed shroud.

The vegetation has naturally the same range, from the semi-tropical palms and

mangroves of the Gulf to the stunted birches and willows that dwindle to starving moss in the farthest north. Many well-watered districts bear rich forests of various timber, which once spread over the Eastern States, but long ago have to a great extent been turned into farms and fences; and the original flora largely gives place to crops native or introduced, plant-life tending to become colonized from Europe in the open country of more settled states, where indigenous growths take refuge in the woods. The most valuable forest trees are coniferous species, among which the redwood and mighty pines, the sequoias of the west, are celebrated for their size; and the monarch of the Atlantic forests is the *Magnolia grandiflora*. There is a wide variety of native and transplanted trees, including most of those familiar to us, some that have been brought to us across the Atlantic, and some bearing our names with a difference. Poets in verse and prose have found rich material for description in the beauty of American woodlands, which put on a special glory at the sunset of the year, here lit up by a Turneresque brilliance of colours but faintly represented in our climate.¹ This autumn glow often dies in a too short spell of mild, hazy, halcyon days, known as the Indian summer, dear to pensive nature-lovers; but one explanation of the name

¹ Miss Cooper, a Transatlantic Miss Mitford, in her *Rural Hours* thus describes the panorama of autumn: "The hanging woods of a mountainous country are especially beautiful at this season; the trees throwing out their branches, one above another, in bright variety of colouring and outline, every individual of the gay throng having a fancy of his own to humour. The oak loves a deep rich red, or a warm scarlet, though some of his family are partial to yellow. The chestnuts are all of one shadeless mass of gold-colour, from the highest to the lowest branch. The bass-wood, or linden, is orange. The aspen, with its silvery stem and branches, flutters in a lighter shade, like the wrought gold of the jeweller. The sumach, with its long pinnated leaf, is of a brilliant scarlet. The pepperidge is almost purple, and some of the ashes approach the same shade during certain seasons. Other ashes, with the birches and beech, hickory and elms, have their own tints of yellow. That beautiful and common vine, the Virginia creeper, is a vivid cherry-colour. The sweet-gum is vermilion. The viburnum tribe and dog-woods are dyed in lake. As for the maples, they always rank first among the show; there is no other tree which contributes singly so much to the beauty

of the season, for it unites more of brilliancy, with more of variety, than any of its companions; with us it is also more common than any other tree. Here you have a soft maple, vivid scarlet from the highest to the lowest leaf; there is another, a sugar maple, a pure sheet of gold; this is dark crimson like the oak, that is vermilion; another is partly-coloured, pink and yellow, green and red; yonder is one of a deep purplish hue; this is still green, that is mottled in patches, another is shaded; still another blends all these colours on its own branches, in capricious confusion—the different limbs, the separate twigs, the single leaves, varying from each other in distinct colours and shaded tints. And in every direction a repetition of this magnificent picture meets the eye: in the woods that skirt the dimpled meadows, in the thickets and copses of the fields, in the bushes which fringe the brook, in the trees which line the streets and roadsides, in those of the lawns and gardens—brilliant and vivid in the nearest groves, gradually lessening in tone upon the further woods and successive knolls, until, in the distant background, the hills are coloured by a mingled confusion of tints which defy the eye to seize them."

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makes it originally a time of dread, which the stealthy redskin warriors chose for a last raid on the white settlements before retiring into their winter quarters. Not that winter was always a protection for frontier forts and blockhouses, often attacked by Indian bands on snowshoes, when the woods had taken on the icy sheen and snowy crust that clothes them with fresh charms displayed through a clearer atmosphere than ours.

Animal life, also, has been much modified by man. Many of the wild creatures of South America range into the North, the puma, for instance, that finds fastnesses among the mountains far up this continent, as it once did in the forests of now settled eastern states. Others, such as the alligator, the gorgeous humming-birds, and brilliant serpents of the Amazon forests, occur in the south of North America, or but rarely in other parts. North America has beasts of its own: the formidable grizzly and other bears in out-of-the-way nooks, big-horn sheep and wild goats as mountain game, huge elks in the forests, the prong-horn antelope and other game of the plains, musk-oxen, fur-bearing foxes and weasels in the far north, with a diffused variety of wild cats, hares, rabbits, raccoons, squirrels, and the opossum as surviving representatives of that marsupial family still so numerous in Australia. But wherever they can be followed up by hunters and trappers, many of these creatures are being killed off, chiefly for their skins. Even the ugly alligators, that once swarmed in the southern waters, are like to be exterminated through the commercial value of their hides. It would be hard to extirpate the innumerable tribes of birds that, with the eagle as their president, people this continent, whose lakes and rivers, especially in the far north, breed such vast flocks of waterfowl.

The most famous game of North America, the so-called buffalo, properly a bison, on which the Indian of the treeless plains was mainly dependent for food, clothes, lodging, and utensils, has been practically exterminated in the course of a generation. There are men still living who can remember seeing them in hundreds of thousands,

covering the ground for leagues. When railways first began to stretch across those hunting-grounds, the trains would sometimes be brought to a stand for hours, or thrown off the rails, by countless herds. But the railway-whistle was their death-song. Indian hunters were wasteful enough, and the range of the buffalo had already been contracting, when an army of slaughterers assailed them with deadly weapons, seeking chiefly their hides, that made not only buffalo robes but belting for the greedy machines of the older states. The plains reeked with blood and carrion, the animals often so hastily and clumsily butchered that every skin brought to market might mean two or three dead carcasses, whose bones could be gathered by hundreds of tons to be turned to account in agriculture and commerce. Idle sportsmen, too, did their share of the work. One bloodthirsty British baronet, on a hunting campaign, is said to have bagged forty grizzly bears and two or three thousand buffaloes. "Buffalo Bill", with more practical aims, had the repute of slaying over four thousand of his huge namesakes in eighteen months.

Before the legislatures of new Western States could interfere, it was too late. From millions the buffaloes have come down to a few scores, hundreds at the most, now carefully preserved in such sanctuaries as the Yellowstone Park. The next largest beast of America, the moose, also needs protection in its northern wilds; where herds of elk come now to be counted. The same extinction might have overtaken the industrious beaver, had the fashion of wearing his fur lasted; and he is being driven back upon the unpeopled forest streams of the north. Even more than man, the coming of domesticated animals seems to have the effect of scaring away wild beasts, though for a time his flocks may be a tempting prey to the wolves and their coyote kinsmen that still haunt western wildernesses, along with jack-rabbits, prairie-dogs, and other shy creatures burrowing on the plains.

For fish the continent is well off, not only in its bordering seas that nurse also great amphibians, but in the rivers alive at the



Wild Buffaloes at Home in Yellowstone Park

Underwood & Underwood

From millions the American bison, or so-called buffalo, has come down to a few scores, now carefully preserved in such sanctuaries as the Yellowstone Park.

spawning season with huge sturgeon, legions of salmon of different species, and such smaller visitants as the "alewives" which early New England settlers could afford to use as manure for their land. The inland waters have trout, bass, cat-fish, blue-fish, and other names unfamiliar to European anglers, who must console themselves for their own disadvantage by declaring that American fishes run rather to size than to delicacy of flavour. We think of the Red Indian as always stalking buffalo, deer, and so forth; but many of the tribes, at one season half-starving, again gorging in plenty, found part or most of their subsistence in the fish which they were skilled to spear out even from beneath the ice.

The whole of the continent was found inhabited by a people who, with the exception perhaps of the Esquimaux in the far

north, appear to be of the same race, whatever its origin, with a variety of speech, customs, and spirit that shows a very ancient dispersion. These, of course, are the renowned Red Indians, no more Indians than they are red, but rather of a coppery brown, growing darker by exposure, for their skin at birth is little less white than our own; nor was the warrior's face beardless till he had extracted its scanty hairs. The "Bow and Arrow people" has been too late suggested as a better name than Indians, to them as unknown as any general name. The titles, too, by which we distinguish their separate stocks, Delawares, Mohawks, and so forth, were often bestowed by Europeans, or, when native, may turn out to mean simply *the* men, as if there were no other men worth consideration within their narrow range of experience. Monuments of their past are

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the puzzling earth-mounds, often of great size and geometrically shaped or in the apparent form of animals, variously designed for defence, worship, or sepulture, which, in the central region especially, point to a much more numerous as well as more cultured population than existed when white men came among it. The Indians were then reduced to small and thinly-scattered tribes, usually at chronic hereditary feud with their neighbours, living mainly by the chase, but also in some cases planting corn round their more-or-less-fixed homes. Some, indeed, were mere nomad bands; others had towns and fields; and certain tribes had attained political strength by confederation, as in the case of the famous Iroquois league of the "Five Nations", that made a prelude to the United States constitution.

The innumerable tribes, with their many branches of agglutinative speech, may be roughly divided into three groups. First, the backwoods and Atlantic Coast Indians, who lived in birch-bark wigwams. Second, the Indians of the Plains, whose movable homes were lodges of buffalo skin, and who, from their Spanish intruders, soon learned a consummate horsemanship. Third, the medley tribes of the Rocky Mountains and Pacific coast, ranging from the miserable Diggers to the comparatively civilized Pueblo, or town, Indians, so called from the remarkable terraced and storied buildings of stone or adobe brick, which they still inhabit, high set on rocky citadels. Ethnologists mark off several main stocks as allied by evidently related speech: the Algonquins, who were the most widely



Detroit Photographic Co.

Among the Hopi (Moki) Tribe of Pueblo, or town-building, Indians, Arizona: "Antelope-men" performing their famous "snake dance"

The dancers hold in their hands snake-whips of eagle feathers tied to a handle, and "bahos" or prayer-sticks. Rattles of the hoofs of a deer or the shell of a small tortoise are tied to the knee, and the hair is unbound. The dances are believed to secure the fertility of the soil.

spread; the Huron-Iroquois, in early days of our colonization the most formidable warriors, whose seat was about the Great Lakes; the Dakota or Sioux tribes of the central plains; the Athabaskan tribes of the west; the Shoshones and Pawnees, also of the west; and the Muskogee or Creek Indians of the south, whom, in some respects, we found the most advanced stock. Even within these kindred groups there might be as wide differences as between an Englishman and a Laplander. A great range of culture appears to have prevailed all over the continent, on which such nations as the Aztecs of Mexico are believed to have pushed their way through the haunts of starveling and lurking bands.

Our conventional idea of the Indian is largely taken from the superior barbarians of the backwoods, because they came to be displaced by a race of settlers who built churches and schools almost as soon as forts, and could write as well as fight. Many of those "tragedies of the wilderness", that cast so grim a light on Indian customs, might be paralleled in experience from other dark parts of the earth where captives and fugitives were not so much in the way of publishing their adventures. We have a whole library of such tales from the early history of New England and Canada, showing most clearly how, above all, the natives were bloodthirsty war-



Notman

On the Canadian Plains: the noble Red Man "at home"

rriors, quick at learning to use the more deadly weapons brought among them, against both one another and the white trespassers on their hunting-grounds. Manly fortitude was their most characteristic virtue, with heartless cruelty as the defect of this quality. An Indian girl would commonly be made little of; her lot was to grow up as drudge of the man, himself from childhood trained to hunting and fighting. His games were sham battles; his education was in bearing pain,

fatigue, and hunger stoutly; as part of his play he would let his skin be scorched with a hot coal or torn by a sharp claw without wincing. When, by the trials and exercises of youth, he had fitted himself for war in real earnest, sometimes after an examination by cruel ordeals, his great ambition would be to take an enemy's scalp; for, till he brought home such a trophy, the aspirant to bloodshed was hardly counted a man. If, instead of coming off victorious, he fell into the hands of the foe, he knew there was no more mercy to expect than he would have given; and it was his pride to suffer in silence the sharpest tortures by fire and steel. The forest tribes, with whom fuel was plentiful, notoriously burned their prisoners alive, the exalted victim chanting a death-song in his agony, and to the last defying the tormentors, who could not make him disgrace his tribe by any sign of fear.

The woof and warp of rude virtues crossed by savage vices have gone to deck out a somewhat fancy figure of the Indian as presented by hero-making romancers. He did not always rise to the height of his character, masked as it is by dissimulating habits of self-command and ingrained suspicion.¹ His heroism was apt to be dashed

¹ "In his manner and bearing", says Colonel Dodge, after thirty years acquaintance with red warriors, "the Indian is habitually grave and dignified, and in the presence of strangers he is reserved and silent. These peculiarities are ascribed by writers on Indian character to stoicism, and the general impression seems to be that the Indian, wrapped in his blanket and impenetrable mystery, and with a face of gloom, stalks through life unmindful of pleasure or pain. Nothing can be further from the truth. The dignity, the reserve, the silence, are put on, just as a New York swell puts on his swallow-tailed coat and white choker for a dinner-party, because it is his custom. In his own camp, away from strangers, the Indian is a noisy, jolly, rollicking, mischief-loving braggadocio, brimful of practical jokes and rough fun of any kind, making the welkin ring with his laughter, and rousing the midnight echoes by song and dance, whoops and yells. He is really as excitable as a Frenchman and as fond of pleasure as a sybarite. He will talk himself wild with excitement, vaunting his exploits in love, war, or the chase, and will commit all sorts of extravagances while telling or listening to an exciting story." Even his fighting was matter of more cry than wool. "I have been told of a desperate battle in which not less than one hundred Indians were engaged four days, the warriors on each side displaying prodigies of valour, and in which one man was killed by a mere accident."



A Notable Indian Chief: Broken Arm (Sioux)

by cunning caution to a degree which might be called cowardice; he much affected the unchivalric merit of running away to fight another day; he might easily be unmanned by childish superstitions; and his defiant valour was most conspicuous when brought hopelessly to bay. He was as vain as hardy; when at leisure from hunting, fighting, or torturing, he would spend hours in adorning himself with paint, feathers, and furs according to his opportunities. These decorations, and other personal property, he got to some extent by trade with his neighbours, in intervals when the hatchet was buried between them; and many tribes made use of money in the famous form of wampum: small shells, black, white, and purple, woven into belts or strings, sometimes adorned with symbolical devices preserved as the records of the past. Hieroglyphic paintings also were common among them; and an extraordinary skill in sign-language helped out ignorance or imperfect knowledge of each other's tongues. They were proverbially

fond of palavering in the councils of the tribe, whose constitution was often a fairly-well-organized republic, practically governed by a senate of old men. An hereditary chief there would be; but, if unworthy or unpopular, he might be set aside; and at the best his office was what he could make it by force of character or liberality. This chief was not as a rule the leader in war, when a general would be chosen for his prowess, as among our own ancestors, of whom *'Iacitus* tells us *Reges ex nobilitate, duces ex virtute sumunt*. Spiritual and medical matters were somewhat mixed up under charge of the "powwows" or "medicine-men" who shaped and interpreted the mass of superstition which was the Indian's public faith, while each warrior might devote himself to unseen influences taken for his private "medicine", symbolized often by the absurd or hideous fetish charms he carried in his "medicine-bag".

So catholic were many of their beliefs and faiths, occurring all over the world at a similar stage of development, that early writers wasted much ink in trying to connect the Indians with those Lost Tribes of Israel who have been so often fondly found. Among institutions thrown into high relief, in picturesque accounts of the tribes, are their ceremonial rites of peace and war, their readiness to adopt captives whom resentment or religion did not doom to the stake—a custom that went to strengthen victorious bands—and the totem, which novelists like Cooper took for a mere crest. Not till the days of comparative ethnology was totemism rightly understood as a system widespread in time and space, indicated among the Greeks and Romans, as in barbarous peoples of to-day. The Red Indian tribes were cross-divided into hereditary clans, each bearing the name of some animal as fabulous ancestor, whose figure might be tattooed on the body, or in some other way serve as device. The numbers of these clans varied; some tribes had seven or eight, named from the Bear, Wolf, Turtle, &c. Their totem made a bond of kinship and alliance even between members of different tribes, while marriage within the

clan was prohibited by what seems to have been a savage attempt at wholesomely counteracting such endogamy as has blighted certain illustrious families of Europe. The savage rule of descent by the spindle side brought it about, in some exceptional cases, that women exercised authority as chiefs or were listened to in councils of the tribe.

The masterpiece of the backwoods Indian was his graceful bark canoe, so frail as to need almost daily repairs after a toilsome passage through rapids and over rocky portages. His most striking gift, all over the continent, was what seemed to white men a preternatural sharpness of savage senses by which he unerringly followed the trail of his prey, or of his foe, reading like print, on grass or twig, the slightest indications of their movements. In the sky he had a clock and a compass; and if it were hid, he would still steer his course by such signs as the foliage of trees, the thickness of their bark, the moss on their trunks, by which he fixed the north as surely as by the "star that does not walk". This faculty of



Indian Totem Poles at Fort Wrangel, Alaska

direction served him well on long journeys, which he made, sometimes, it would appear, out of mere curiosity; or when their native hunting-grounds failed them, a tribe might emigrate across half the continent, slinking past the preserves of their enemies, and seeking new homes with a confident enterprise that brought about a jumble of alien and often hostile stocks. Thus the Algonquins of the east had branches spread out to the Rocky Mountains; the Iroquois straggled to the south as the Cherokees; and the Dakotah Indians found kinsmen as far off as Carolina and Arkansas. Not that to be kinsmen was always a bond of peace, for the most exasperated Indian feud in our records was that between the Iroquois and the Hurons, cousins and neighbours as they were.

Constantly at war with each other, the Indians seldom could stand together long in firm alliance against their invaders, even when they did not lend themselves to subduing their own brethren. For a time their prowling tactics and ruthless raids cost much suffering on the frontiers of the new settlements; in several cases they gained signal

victories over the careless confidence of regular soldiers; but the hardy frontiersmen soon learned to match this foe at his own stealthy tricks; and in the long run superiority of discipline, resources, and persistency told upon the tribes, exterminated, pushed back, or reduced to helpless remnants. The French settlers of Canada, indeed, were more ready to mingle their blood with that of the natives, and thus, with the aid of a form of religion less uncongenial to savage life, brought about a half-bred submissiveness which we inherited in Canada. The scornful Anglo-Saxon, for his part, held himself rather above such alliances; his dealings with the red man were more masterful, yet by the introduction of his vices, his diseases, and his luxuries he wasted the forest people faster than by his deadly weapons.

When the backwoods Indians had been mostly cleared off, like their forests, the conqueror came into collision with the horse-Indians of the plains, who almost to our own time gave him sore trouble.¹ There are Sioux warriors still alive who helped to shoot down Custer's regiment, bravely but

¹ The Indian wars bulk largely in colonial history through their melodramatic and picturesque incidents. One of the most destructive of them, not much more than half a century ago, passed with little notice as overshadowed by a mightier struggle. At the outset of the Civil War the newly-settled frontiers of Minnesota were unexpectedly ravaged by Sioux bands, throwing off a very superficial show of civilization. Fifteen counties were ruined by fire and steel; thirty thousand people became homeless fugitives; lonely settlers were massacred; towns and forts were besieged, the loss of life in all being put at from one to two thousand. But as soon as the surprised settlers had time to rally, the tide turned, and the Indians were driven back by what military force could be diverted from Southern battle-fields. The "Los", as they now came to be nicknamed in satirical allusion to "Lo! the poor Indian", were forced to surrender or remove out of reach. Over four hundred warriors were put on trial for murder, a new feature in such struggles. Some three hundred were sentenced to death; but to the disgust of the frontier settlers, still exposed to danger, eastern public opinion availed with President Lincoln to commute the punishment to imprisonment, except in the case of thirty-nine flagrant offenders, who were hanged. All the red men gained by their outbreak was to be driven some hundreds of miles farther west, leaving their lands free for new settlements—the usual end of an Indian war.

If the Indians were cruel and revengeful, our race in these long wars showed little of Christian qualities. Massacre was given back for massacre, treachery often

for treachery, and the real *casus belli* was as often as not the pushing white man's haste to turn the Indian's lands to profit. In the States, the red man's wrongs were exasperated by the knavery of Indian agents, politicians whose greed and ignorance had to be paid for by the blood of brave soldiers, who, for their part, if given a free hand, could have come to a better understanding with their wild enemies. One might quote from American writers most severely-worded condemnations of the United States' dealings with these dependants. The worst case was perhaps that of the Nez Percés in our own time, which had this novel end, that, in the pages of the *North American Review*, the conquered chief Joseph argued out the quarrel with the victorious general, who, acting under orders, had shown some sympathy with foemen worthy of his steel. This Oregon tribe could boast of never having slain a white man; they had willingly received missionary teachings, which, indeed, they developed into an indigenous form of religion; they had taken to agriculture and industry; and their only offence was the ownership of land coveted by the unruly settlers, who set them the example of violence. Thus the crime of Naboth's vineyard came fifty years ago to be re-enacted on a larger scale by a Christian nation which delighted in gushing sentiment over European patriots and exiles. In the war forced upon Joseph and his people, and by them carried on with unexampled humanity, railways, telegraphs, and artillery had the best of it; but such a victory left a dark stain on the honour of the republic, that did not even keep its promises to the vanquished.



Totem Poles in an Alaskan Village

recklessly led to annihilation among the Black Hills of Dakota, a slaughter fiercely avenged in 1891, when, on the North Pacific Railroad through their old dominion, the Sioux were again stirred up by an extraordinary fit of religious excitement, in which heathen and perhaps Mormon superstition formed an explosive compound with very imperfect ideas of Christianity. In our generation, also, Uncle Sam had to quell the cruel Apaches and other warriors, who on the Pacific side long vexed the Spanish settlements. But for several generations Canada has been at peace, with the exception of feeble risings among discontented French half-breeds.

The Indians are nearly all tamed now, for the most part settled on reservations, where it is hoped they may be schooled in industry, and where often in the meantime they must be fed in a dependence that unnerves their manliness. Some few, indeed, have dis-

tinguished themselves in the arts of peace, as lawyers, doctors, and authors, as well as soldiers fighting among the ranks of their conquerors. It remains to be seen whether the Indian in general can keep himself as a farmer, now that his hunting-grounds are being cleared of game. One point made by sentimental poets is questioned by statisticians. It seems doubtful if the red man be dying out so fast in his restricted bounds. The number of Indians in the United States and Canada is put at 400,000 or so; and some writers try to show that they never could have numbered much more over the whole continent in days when they were kept down by war, hardship, and frequent spells of starvation. Within the States the latest estimate gives an actual increase in the last generation, marked also in Canada, where indeed the calculation seems more confused by a thicker fringe of half-breeds, merging in the general population.

The World of To-day

The Indian wars were too often kindled or maintained by hostile colonies of white men, using barbarous allies against each other. The oldest town in the United States is St. Augustine, in Florida, a name extended by its first Spanish explorers to all the unknown continent, which at the other end the French christened Canada. French Huguenots had already made an attempt at settlement in Florida, only to be massacred by Spaniards—a bloody deed, bloodily avenged. More persistent French efforts were made up the course of the St. Lawrence, its mouth discovered early in the sixteenth century. Jacques Cartier led a colony to its banks so soon as 1540; then at the beginning of the next century Champlain founded posts at Quebec and Montreal, from which French traders and missionaries pushed their way into the water-seamed forests.

The first English landings, in Elizabeth's reign, had been like a fire lighted with green sticks, their most evident effect the introduction of tobacco into England, where, as we read, Sir Walter Raleigh's servant poured a pail of water over him, taking a lighted pipe as a sign of his being on fire. The fisheries of Newfoundland had given profitable employment to English as well as to French and Spanish mariners. Curiosity and speculation as to the mainland had been excited by unlucky attempts at settlement; then the matter came to be taken up by two separate joint-stock Companies, formed in James I's peaceful reign, one at London and one at Plymouth. To them the cautious king granted rights of colonization on what is now the United States seaboard. The London Company was to take the southern part of what was then called Virginia, the northern should be the field of the Plymouth Company, neither to "plant" within a hundred miles of each other. The king was to have his share of what honour and profit might accrue, the adventurers were to be at all the trouble and expense—a division of kicks and ha'pence which seemed natural enough in those days. These two modest enterprises were the kernels out of which grew that great republic, long showing two

different strains of character derived from its separate founders.

The colonists of the south were mainly a somewhat unpromising crew, notoriously ne'er-do-well at home, spendthrifts, idle fellows whose chief merit was being able to boast themselves of gentle blood, and, with or without that qualification, often such as their friends were glad to get rid of. The mistake was here made of supposing that the "New World could be planted with the dregs of the Old". In later days Virginia continued to be recruited by impecunious gentlemen, but also by convicts and by unfortunate children "spirited" away through an execrable kidnapping traffic carried on in Bristol and Aberdeen up till George II's reign. The first consignment of adventurers had sore troubles from their own quarrels and improvidence, from the hostility of the Indians, and from the swampy site on which they fixed their Jamestown settlement, like that Eden at which even Mark Tapley found it hard to be jolly. Luckily there came to the front among them a man of the right stamp to lead such a forlorn hope. This was John Smith, that truly English name, in spirit akin to the Elizabethan worthies who went their way to heaven with a clear eye upon earth, believed sturdily in beef and beer, and thought no shame to hate Spaniards, papists, and cowards. Smith is accused of being a bit of a romancer, not to say a liar, in the books he published;¹ but at least he had a firm

¹ The famous story of Pocahontas, from whom several of the first families of Virginia boast descent, has been a matter of controversy, to which many years ago the present writer believes himself to have contributed an important consideration, by pointing out how Smith confesses that he was in his youth an ardent student of chivalric romances, and how the adventures he goes through in his amusing autobiography are exactly the stock ones attributed to the heroes of Don Quixote's library. More than once he gives himself the stereotyped *bonne fortune* of being saved from death by the interest shown in the Christian prisoner by the Paynim chief's daughter. As for his rescue by Pocahontas, he says not a word about that in his story published soon afterwards, and only some years later recalled such a striking incident when Pocahontas had become a lion of London. He contradicts himself as to her age when he makes her susceptible of so warm interest in her father's enemy; but another account of her at this time represents the romantic princess as a shameless



Hospital Street, St. Augustine, Florida: the oldest town in the United States

"Hotels and more hotels, . . . and in the middle of them, the small remnant of a Spanish town, a narrow street going from a ruined fort to the place that was the slave-market—this is all St. Augustine, and exquisite it is."—*Paul Bourget*

grasp on realities, and through his efforts mainly the colony was pulled through its early struggles till it became worth the appointment of a more ornamental governor, Lord Delaware.

Disabled by an injury, Smith came home to act as an earnest advertising agent for the new colonists, with which his heart was till it lay at rest in the church opposite Newgate. He offered his services to the Plymouth Colony, that had much the same difficult beginnings, and made no headway till its

little hussy who turned somersaults for the amusement of the settlers, like a street arab. Other very doubtful passages might be pointed out in his narrative. To these the late Mr. Harold Parsons drew attention (*Blackwood's Magazine*, July, 1903), showing how Smith's "economy of truth" may be explained by the fact of his having practised as a pirate at the time when it was growing safer not to profess this vocation.

territory came to be peopled by settlers of a different temper from those of Virginia. In 1620 sailed the *Mayflower*, to land its austere emigrants on the rock of New Plymouth. Ten years later began the great Puritan exodus to Salem. These two movements are often confused by careless writers; but in their origin they were distinct. The "Pilgrim Fathers" were a congregation of obscure sectaries, "Brownists", who, under the pastorship of John Robinson, a man of spiritual insight far before his time, had sought freedom of worship at Leyden, and thence set out as the advanced guard of the main enterprise. The name "Puritan" answered then to "Evangelical", and the thousand settlers who in 1630 fled from the tyranny of Laud and the Star Chamber, counted some of the best blood in England, with men of learning and position, who were

The World of To-day

disposed to look down on the Brownists as dissenters from the Church to which this latter emigration professed loyalty, "though we separate ourselves from the corruptions thereof". Almost at once, however, Puritanism grew on its new soil into that spiritual tyranny beside which the Pilgrim strictness seems humane and tolerant. Moreover, in his haste to let this troublesome people go, Charles I had given them a charter under which they might live politically as well as spiritually independent, in those unknown territories tacked on by legal fiction to the manor of East Greenwich, that thus became on paper such an enormous parish.

In ten years some twenty thousand earnest-minded Englishmen had joined the exiles, who soon transferred their centre to Boston. The Civil War at home came to clog that Pharaoh's chariot wheels, by which time the young colonists were confederating themselves as the States of New England. Rhode Island was at first held aloof from their union, as founded by Roger Williams on the pernicious heresy of toleration, "polypieté" seeming to Puritan divines "the greatest impiety in the world". Maryland had a special origin as a Roman Catholic asylum under Lord Baltimore; and Pennsylvania was a peaceful colony of Quakers, who at first had to undergo sore persecution at the hands of the intolerant Puritans. The New England confederacy grew apace, in which Brownists and Churchmen had soon come to be of one mind, as of one stern temper steeled by wrestling with ghostly and bodily foes. On a soil not over rich, in a climate of hard extremes, the new power took root with such firmness that, half a century after the arrival of the *Mayflower*, white men far outnumbered the retreating Algonquin Indians, whom they had found much thinned out by a pestilence at their first coming.

Meanwhile Virginia had been prospering in another way through the slave labour imported to work her plantations. These two stocks went spreading out into the interior and towards each other along the coast till they came together by taking in the central Dutch and Swedish colonies that were to be

the States of New Jersey, New York, and Delaware; while Pennsylvania made an international refuge that attracted many Germans and Swiss. New England had sore trouble with her French neighbours to the north, and their Indian allies; then the colonies grew on to fresh points of painful contact between the hostile powers. France, firmly seated on the St. Lawrence, owed her authority to devoted Jesuit missionaries as much as to bold soldiers and traders. From the Great Lakes her agents struck the waters of the Mississippi, and down it reached a hand to her later settlements in Louisiana; while by their Indian alliances these adventurers were guided to the forests and prairies of the west. Thus, when the English pioneers crossed the Alleghanies, they found their advance westward barred by a chain of French posts. In the long, widespread wrestle between these two Powers took part redoubtable warriors like the Iroquois, whom white men found exterminating their kinsmen and neighbours around, as they did at a more rapid rate with the fire-arms put into their hands; and now were enacted the fiercest scenes of the backwoods border wars, in which fellow-Christians stirred the red men to atrocities upon each other. About the middle of the eighteenth century that international struggle rose to its height in the Old and the New World. In America it ended abruptly with the campaign that, after the taking of Quebec, gave all Canada to Britain and left our colonies free to expand to the Mississippi.

But that relief brought to a head old grudges between the colonies and their mother country, more or less stifled so long as they had to stand on guard against a foreign foe. These chips of an old block our Government was for touching in such a tender British point as the pocket. It was proposed, fairly enough, to lay upon them part of the expense of their deliverance from French and Indian peril. The colonists, justly enough, objected to taxation without representation. The quarrel was inflamed by that congenital pigheadedness for which the sons of Britain are the last to make

allowance; yet recent American historians seem more ready to admit that all the right was not on one side, as ours have long owned how much we were in the wrong. An unwise king, careless ministers, and haughty governors did their work of disunion, while public opinion, uninstructed and indifferent

what she had gained, and leaving to grow by its own strength a new nation in which our race has a right for pride, as had not the rulers under whom it sprang up with little wise or just fostering.

Thus the bulk of the continent came to be divided between two great English-speaking



Detroit Photographic Co.

The Village Common at Lexington, Massachusetts: the scene of the first armed conflict in the American War of Independence (April, 19, 1775)

"Minute men" were militiamen who had undertaken to turn out for service at a minute's notice. In Boston alone they numbered 16,000 prior to the outbreak of the war. The engagement at Lexington, where a British force under Major Pitcairn was confronted by sixty to seventy "minute men" under Captain Parker, lasted only a few minutes. The boulder shown above was erected in 1709 on the actual spot occupied by the Americans.

at home, became loud and clear in the colonies, which found generals and statesmen at their need. Massachusetts took the lead in resistance, where, in 1775, "was fired the shot heard round the world". A few more years, and Washington's victories of wisdom, energy, and patience had won the independence of the United States. Britain kept Canada, losing the best part of her American empire before she well knew

Powers, absorbing foreign colonies, and in the next century stretching themselves across the central wildernesses, to reach their isolated posts on the Pacific side. The north-western corner, thinly colonized from Russia, was at the end of the nineteenth century bought by the United States, that then first added an outlying territory to their compact mass. The frozen Arctic wilds were explored by international rivalry,

till the Stars and Stripes had the honour of being first planted at the earth's northern pole. Meanwhile, the independent nation that, above the heraldic devices of the Old World, sets up this practical pattern as its badge, had been growing so great as to usurp the name of American over less numerous and prosperous peoples of the double continent, and now claims to rival, if not to surpass, all Europe in importance, power, and wealth. In point of amenity alone, considerably patriotic Americans are fain to recognize that time has still something to do for their continent.

"We have not", writes C. E. Norton to Ruskin, "been long enough in New England to tame the earth, to subject it, much less to bring it into sympathy with man. It has not taken the imprint of his likeness. The surface of Italy has been moulded by the hands of men, like clay on the potter's wheel. England has been shaped by the English of two or three thousand years into a curious image of themselves. But here the soil has not been worked long enough to show many marks of old labour, and nature at once reasserts her rights over the fields that man deserts after but a partial conquest of them. It may be this resistance of the Earth to man, this brief period of culture as compared with the immemorial trappings and diggings and holings and ploughings of the Old World, that in part accounts for the ugliness and bleakness in our common landscape. . . . Nature certainly did not show half so much poetic imagination in the construction of

America as she did in Europe. She finished you off with exquisite elegance, and she left us very much in the rough. At least all the western side of Europe was obviously a labour of love—towards Russia, nature began to get impatient and moulded in the flat with a very coarse thumb."

The foregoing sketch of North America has rather overlooked its southern end, the tapering mass of Mexico and the crooked central ridge by which it is connected with Southern America. To the latter division this region is more closely allied in physical features, in climate and productions, and in colonization relations, giving it a history and scenery akin to those of other disunited states sprung from the Latin stock of Europe. But its natural wealth brings it more and more into touch with its pushful neighbours on the north; and before long the chronic disorder through which so much wealth runs to waste may provoke the Power nicknamed Uncle Sam to take them under his masterful tutorship. He has already done so for one unstable republic, through whose territory, at the southernmost and narrowest point of the isthmus between the two continents, is now cut the inter-oceanic canal that may be taken as parting of North and South America. Central America, then, will be included in the present volume, though for some of its characteristics the reader may be referred to that dealing with the southern half of the continent.



Ruins of the Mission of San Antonio, California

ARCTIC AMERICA

THE POLAR REGION

Like Asia and Europe, America extends beyond the Arctic Circle, but chiefly in the form of inchoate masses of uninhabitable land confused with islands of ice, that seal up both ends of our world. To within six or seven degrees of the Pole our maps guess at imperfect outlines: beyond that they are a blank, where, till our own time, eyes have been vainly strained into the mysterious gloom. In the short Arctic summer the edges of this frozen realm break up and come drifting southwards to cool seas and lands over which the sun has firmer sway, whence in turn the evaporated particles may be wafted back to the Pole.

The most impressive form taken by the wreck of winter is in the crystal mountain islands, carved by wind, waves, and sunshine into beautifully terrible shapes, glittering under snowy crusts, studded with gigantic icicles and pinnacles, shaded with delicate tints, streaming with cascades of melted water, marbled with blue veins by their refreezing, often sparkling in the sun like a mass of gems, or veiled in a rainbow mist of their own vapour. These bergs are born as masses dropped from the mouths of mighty glaciers, whose "calving", as the expressive term is, throws the water around into so overwhelming commotion that a boat's crew, stealing past the silent ice face on which may hang such a gigantic tear, dread by the least sound to shake it into thundering fall. The clear view of such an entrancing spectacle is exceptional in the Polar World; and the Arctic icebergs are said not to be so huge as those of the more fiercely frozen Antarctic. Yet Dr.

Hayes once counted five hundred in Baffin's Bay before giving up the impossible enumeration; and he measured one as calculated to weigh two million tons. Even in warmer latitudes they have been encountered miles long, probably a range of ice islands frozen together, rising to a height of two hundred or three hundred feet. Their apparent bulk must be multiplied nearly tenfold, such a small proportion emerges above water. As they drift along into milder air, the masses are continually shifting their centre of gravity by melting, crumbling and splitting, till, after being the toy of winds and waves for years, they fall into a state of honey-combed, gaping, and drivelling ruin, at length to sink, perhaps with a shudder that stirs the sea like the dying throes of some fabulous leviathan.

Icebergs may present themselves strikingly in open latitudes, when free from other agglomerations of ice. In the far north the duller and coarser scum of its wintry ocean drifts mainly as fields and floes, so distinguished according to the size of the floating masses, that in turn break up and pack themselves afresh, their surface squeezed and crushed into miniature ridges, ravines, and peaks, here showing a chaos of slabs piled upon each other, there thickly set with "hummocks" like the wave-tops of a frozen sea, often covered with coats of bristling roughness from melted and refreezing snow, or the edges cut up into knife blades and needles by showers of summer rain. When the air is clear, the refraction of these floating fields gives a map of them on the sky, that "ice blink" by which an experienced Arctic voyager can tell, leagues away, what he is

approaching, even the character of the surface being marked by different tints, grey or yellow, while darker streaks indicate openings for which he must make.¹ These "leads", lanes or lakes of water, are always opening and closing, so that even when darkness or dense fogs, sudden gales or blinding storms of snow, do not add to the perils of ships among the ice, their crews must stand ready for the chance of collision with irresistible masses. Now sailing or steaming, now towed by her boats, now warped along by an anchor fixed in ice, now battering it with her strong bows, the vessel finds and feels her way onward, keen eyes perched up in the "crow's-nest" of her foremast to watch the shifting reefs through which she works a tortuous passage, ever in danger of being grounded on a submerged spur, of being crushed like an egg-shell in a resistless vice, of being heaved up between two converging edges as by the "power of a thousand jack-screws", or perhaps of being quietly frozen into a solid pack, where she may remain embedded for a year or two, slowly drifting at the mercy of silent forces as fearsome as those of the earthquake and the volcano.

Miserable must have been such a fate to

¹ "A world of wonders and enchantments, a complete horizon of wild fantastic forms, ever changing, ever new, a wealth of brilliant rainbow hues playing and glowing amid the cold purity of the crystal ice, such are the features of the picture which the ingenuity of the imagination so often fondly creates. Such, too, are often the illustrations of books, written apparently to give the reader impressions of scenes which the writer can never have beheld himself. But not such is this ice-world. These mighty fantastic forms are wanting, all is monotony and uniformity, features which nevertheless leave an indelible impression on the mind. In small, indeed, it has forms enough and in infinite diversity, and of colours all tints and strange effects of green and blue, flashing and playing in endless variation; but as to its large features, it is just their overpowering simplicity of contrast which works so strongly on the observer's mind: the drifting ice, a huge white glittering expanse stretching as far as the eye can reach, and throwing a white reflection far around upon the air and mist; the dark sea, often showing black as ink against the white; and above all this a sky, now gleaming cloudless and pale-blue, now dark and threatening with driving scud, or again wrapped in densest fog, now glowing in all the rich poetry of sunrise or sunset colour, or slumbering through the lingering twilight of the summer night."—Dr. Nansen's *Crossing of Greenland*.

the ill-provided sailors of a former day, thus imprisoned amid paralysing darkness and cold, with no signs of life but the walruses and seals that make their playground on the ice, the ghost-like bears and foxes that prowl on to it in search of prey. Even our modern explorers have often been sorely tried, well stored as they are to stand the long winter siege by help of preserved meats and vegetables, medicine chests, music, libraries, scientific observations, and occupations organized to keep up their spirits, as Parry sought to do by making his crew run round the deck to the tunes of a barrel-organ. The sharp cold, which may come down more than a hundred degrees below freezing-point, is no such dire enemy to full-blooded men, though their breath is frozen in sleep, falling on them as tiny snow; though beards are filled with needles of ice; though to strip and to wash is an ordeal, where clothes freeze stiff on the body and the touch of metal burns like fire; though bread grows hard as a stone, meat must be chopped with an axe, and wine and spirits lose heart in the intense frost that blows into men's faces like cuts of a whip; while without vigilance they may fall numbly into the mutilation of frost-bitten faces or members. Catching cold is less common here than in our own climate, unless when its raw damps are reproduced by a thaw suddenly raising the temperature just beyond freezing-point. The worst evil seems the darkness, in which it is said that dogs go mad for dreary dread. During four long months a death-like pall settles on the naked world, only a faint greenish twilight marking the hour of noon; but the true night, lit by a cold moon and sharp stars, is sometimes drowned in the glories of the aurora, that like a continued glare of lightning reflects its marvellous colouring on the snowy stretches below. It is but a pale reproduction of this display that appears in our temperate climes. In the nightless summer, too, the far north is haunted by uncanny phenomena—fog-bows, haloes, and mirages of ice not less deceptive than those of burning sand. Dr. Hartwig, in his *Polar World*, thus describes a crowning glory of this region:—



In the Polar Seas: pack ice, with channels of open water

"Night covers the snow-clad earth; the stars glimmer feebly through the haze which so frequently dims their brilliancy in the high latitudes, when suddenly a broad and clear bow of light spans the horizon in the direction where it is traversed by the magnetic meridian. This bow sometimes remains for several hours, heaving or waving to and fro, before it sends forth streams of light ascending to the zenith. Sometimes these flashes proceed from the bow of light alone; at others they simultaneously shoot forth from many opposite parts of the horizon, and form a vast sea of fire, whose brilliant waves are continually changing their position. Finally, they all unite in a magnificent crown or cupola of light, with the appearance of which the phenomenon attains its highest degree of splendour. The brilliancy of the streams, which are commonly red at their base, green in the middle, and light-yellow towards the zenith, increases, while at the same time they dart with greater vivacity

through the skies. The colours are wonderfully transparent, the red approaching to a clear blood-red, the green to a pale-emerald tint. On turning from the flaming firmament to the earth, this also is seen to glow with a magical light. The dark sea, black as jet, forms a striking contrast to the white snow plain or the distant ice mountain; all the outlines tremble as if they belonged to the unreal world of dreams. The imposing silence of the night heightens the charms of the magnificent spectacle. But gradually the crown fades, the bow of light dissolves, the streams become shorter, less frequent, and less vivid; and finally the gloom of winter once more descends upon the northern desert."

Steam has, of course, given the mariner a welcome help in his struggle with the ice; but in the farthest advances that have been made to the north, he counts on using his

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ice-bound vessel mainly as a base of operations, sallying forth in small parties, with boat-sledges drawn by dogs, or propelled by sails, over the smooth ice. Kites, too, have been tried as a motive power, and balloons are suggested as a possible means of rising over the obstacles of a land journey; but poor M. André has never come back to tell us how he fared in that nipping air. The sledge journeys are a trying school of manhood, attempted by choice in the coldest spring season, because then at once the light begins to serve and the ice continues to hold. As little as possible for comfort and provision will be taken, where every pound's weight tells in the difficulty of hauling or shoving loads that must often be unpacked and carried piecemeal over a wilderness of obstacles, among which the floundering travellers are turned out of their way or brought to stand a hundred times a day; and when by heartbreaking efforts they hope to have gained a few miles, it may happen to them, as to Parry, to find that they are labouring in vain over ice that is imperceptibly carrying them in the wrong direction, their painful steps more ineffectual than on a treadmill.

In spite of such formidable defences, among which every Arctic sailor brings away tales of hairbreadth escape, the ice kingdom has been often invaded by bold adventurers hoping to gain the goal so many have nobly failed to reach. An attempt to reach the North Pole was made as far back as the beginning of Henry VIII's reign. Under George III Parliament offered a reward of £5000 to any captain who should win within a degree of that point. Since then many expeditions have struggled to carry rival flags to the Pole, of late hardly a season passing but that some party was bound in the far northern ice, seeking the achievement of this quest. In our time the most celebrated failures have been that of Captain Nares, who gave the task up as impracticable; the patient efforts of Commander Peary to reach the Pole by way of Greenland; and the well-equipped voyage of Dr. Nansen, who made his way to 86° 14', a record surpassed by some twenty

minutes in the expedition under the Duke of Abruzzi. At last, after much excitement over what seemed a bogus claim, with dramatic suddenness came news that Peary had won the long-sought honour on 6th April, 1909, having already been nearer the Pole than any authenticated competitor.

The American sailor's well-deserved success, ungrudged by his rivals, had come through profiting by the experiences of himself and others on so many repeated attempts. Financed by an American Arctic Club, he set out in a vessel specially built to encounter the ice, named the *Roosevelt*, after a chief patron of the enterprise, and manned chiefly by Newfoundlanders. From Etah, far up the western shore of Greenland, he pushed his vessel through the channel between it and a further mass of land; then from the northern end of this channel, about 7° short of the Pole, launched out on sledges across the sea of eternal ice. Only one of his comrades was lost, Professor Marvin, unfortunately drowned by slipping through a frozen surface. With a picked band of Esquimaux, Peary reached the Pole, where, taking soundings under the ice, he found no bottom at a depth of 1500 fathoms. His plain narrative may well be tinged with a glow of triumph, when he records how careful observations showed that he stood on the point of our world.

"The Pole at last. The prize of three centuries. My dream and goal for twenty years. Mine at last! I cannot bring myself to realize it. It seems all so simple and commonplace. . . . East, west, and north had disappeared for us. Only one direction remained and that was south. Every breeze which could possibly blow upon us, no matter from what point of the horizon, must be a south wind. Where we were, one day and one night constituted a year, a hundred such days and nights constituted a century."

Shaking hands with his party all round, in congratulation of their success, Peary naturally proceeded to hoist the Stars and Stripes on a cairn, taking possession of the North Pole in the name of the American Republic. This act of annexation may be held for a mere platonic conquest. Mixed

with names that commemorate the efforts of other nations, American explorers have lavished in this region such titles as Grant Land, the Lincoln Sea, Cape Columbia, the Agassiz Glacier, the Garfield Range, the Greeley Fiord and so forth; but the possession of a frozen wilderness is not likely to stir disputes between rival Powers, unless on grounds of sentiment.

The north-west passage from the Arctic to the Pacific was another object of ambition to hardy mariners. Sir John Franklin's famous expedition was robbed of success by starvation about the middle of last century. M'Lure, with one of the parties sent to search for Franklin, accomplished the passage but lost his ship. The first to sail back in triumph from this exploit was the Norwegian, Amundsen (1906), before he gained ampler renown by his attainment of the South Pole.

The North Pole's nearest natives are the Esquimaux, or Eskimo as their name is now usually written, found scattered along the

American Arctic shores, and a few of them in the adjacent corner of Asia. This feeble and stunted race, most familiarly known to us in Greenland on the threshold of the Polar region, is held distinct from the Red Indians spread over the rest of America, a view indeed that does not go without question. They are believed to number not more than thirty thousand in all, living in bands rather than tribes, that shift their quarters within narrow limits and hold little intercourse with each other. Their low stature, flattened noses, oblique eyes, and yellowish or brownish skins suggest the Turanian type of Asia, dwarfed by their hard life. One group, living near Cape York, above the settlements of the west coast, is distinguished by greater height, which has given these the by-name of Arctic Highlanders. About Coronation Bay, on the northern shores of Canada, the explorer Stefansson recently came upon tribes using bows and arrows and copper knives, whom, from their light hair and blue eyes he took



An Eskimo Summer Camp, Labrador

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to be descendants of an old Norse colony, lost in the icy wilds, and so completely forgetful of any such origin that most of them had never heard of white men.

The Eskimo all use dialects of a peculiar agglutinative language in which a whole sentence can be run into a single word. Like so many other savages, they proudly call themselves Innuít, "*the people*", as if there were no other people worth considering; and Eskimo is said to be an Indian word meaning "eaters of raw flesh". Their food is indeed the flesh and blubber of whales, seals, walruses, &c., and their dress the skins of fur-bearing animals, in Greenland shaped as European jackets, trousers, and long boots, both sexes wearing much the same garments, the women distinguished only by their top-knots, which in some parts are bound by red, blue, or black ribbons to denote maid, wife, and widow. The women, some of them in youth not ill-looking, are as hardly active as the men, and furnish crews for the boats in which they follow the intricacies of the coast. In summer they live in skin tents; in winter they crowd into houses better described as burrows, where the more barbarous bands love to pig in Arcadian nakedness amid a thick stench of train oil and other foul odours, and the smoke of ever-burning oil-lamps. When the mild weather comes they mount the roofs of their huts to enjoy the sun, then perhaps carelessly burn this shelter, forgetful of the long winter that will come again, so that the shores are dotted by patches of rank grass sprung up from the ashes and offal of some filthy home. Their sole acquaintance with washing seems to be when a mother will sometimes lick her child, like a kitten. To children they are indulgently kind, while harsh to their dogs that make part of the family. Their tastes would seem repulsive in well-regulated nurseries, for they rather prefer fish in a state of decay, and what berries they gather in autumn may be eaten soured in oil instead of cream. Imprudence is their truly savage fault. With senses sharpened by hunger, "eldest of the passions", they make keen hunters and fishermen, adroitly driving their light skin

canoes over the icy waves and boldly attacking their big game with bone-pointed spears and arrows; angling for sharks and huge halibut through holes in the ice, or stalking the seal from behind a sail set on runners. But while gorging on their prey they do not always think of storing for the future, then in hard weather suffer from starvation as well as frost-bites. As soon as they get more deadly weapons, they use them to exterminate the game, and in many parts have almost destroyed the eider-duck, which about the shores gave a valuable harvest of down. They do not take the trouble to cultivate such stunted vegetables as will grow here, but are content to live on rancid meat or half-rotten fish, and to hibernate on their own fat, like bears. In their natural state, indeed, they have little inducement to save, their rule being an unorganized socialism in which the wise and the foolish fare alike.

These people do not tame the reindeer, like the European Lapps. Their only cattle are the breed of bush-tailed, fox-headed, sharp and upright-eared dogs, "Pomeranians multiplied by four", as Sir W. Butler describes them, that, on the northern shores of the continent, are harnessed to sledges, six or eight of them dragging a load of 500 lb., at the pace of a dozen miles or more an hour over smooth ice, and they may be driven 60 miles or so in a day. These beasts of burden require a good deal of management, being so fierce that if not well fed they will sometimes attack their masters; and they are always given to fighting among themselves. One dog in a team bites its way to a position of supremacy, then, harnessed as leader, this "boss" directs, punishes, and controls the rest, showing extraordinary powers of instinct by which the driver often gets a useful hint as to his route—and strongly resenting any injustice to its own proud person, while it approves its subordinates being kept in order by a liberal use of the whip. Quarrelsome as these creatures are, it appears that they soon come to recognize the superiority of a European dog of the same size, which, like its masters, treats the

native curs with dignified contempt, and plays the sultan among the females, heedless of impotent jealousy shown by bristling hair and snarling teeth at a respectful distance. Dogs, as well as men, in Greenland, suffer maddeningly from mosquitoes and black flies, a plague beside which all the insectry of Christendom might seem a flea-bite. Among other distempers, the dogs are liable to rabies, an epidemic of which may ruin a whole district. Mr. Harry Whitney, who has hunted with the Eskimo, tells us that they themselves are liable to temporary attacks of insanity in the long winter night, and no wonder, when we read his account of its appalling gloom:

“It is unreal and terrible. Even the moon-

light is unnatural, casting upon the snow and ice, the wind-swept rocks, and the people themselves a shade of ghastly, indefinable greenish yellow. Shifting shadows flit among moving ice masses like wraiths of departed spirits. A death-like silence prevails, to be broken only by the startling and unexpected cracking of a glacier, the sound of a mighty thunderclap, or the smashing together of great ice-floes with a report like heavy cannon.”

Besides the northern outposts of Canada, two corners of the Arctic region, the old Danish colony of Greenland and the originally-Russian dependency of Alaska, have, by intercourse with happier lands, been in part thawed out of their icy solitude. An account of them may round off our Polar survey.



In the Frozen North: an Eskimo feeding the dog-team of an Arctic expedition

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GREENLAND

The stretch of America nearest Europe, the first to come authentically into touch with Europeans, is Greenland, one of the largest islands in the world, only of late years shown to be an island, whose edges are still imperfectly explored. It is roughly measured as not quite 1700 miles long by 800 broad. Little of it, indeed, is known beyond harbours here and there on the coast line, cut up into a jagged fringe of islands and fiords, bristling with *chevaux de frise* of icebergs and ice-floes, that make its access difficult even in summer, while, during the long winter, it is altogether sealed up by frost. The east side, washed by a cold Polar current, is almost always thus fortified; the settlements lie on the inner west coast, that presents a rather wider hem of habitable land. The outer coast is more deeply indented by fiords, one of them nearly 200 miles long; and at their heads rise the highest mountains, one guessed at 10,000 feet, more or less. The lofty interior appears to be one great snow-field, on which lichen-stained rock knolls emerge from a crust of ice thousands of feet thick, loaded with deep snow, squeezing itself into imperceptible glacier motion. This is quite uninhabited, and was taken for impassable till, in 1888, Dr. Nansen won his spurs as a knight of Arctic exploration by crossing it from east to west with the help of *ski*, the Norwegian snow-runners, as well as Indian snowshoes, and sails to drive his sledges over the snow, his main difficulty being in the preliminary stage of getting to shore through the drifting and splitting ice-belt.

This north-east corner of the continent was discovered by Icelanders in the Dark Ages; and down to the century before Columbus it had flourishing Norse colonies, which vanished so completely from European intercourse that several expeditions failed to find them in the seventeenth century; but, if half what is reported of their prosperity be true, the climate must

once have been a more genial one. In modern times, Greenland passed into the ownership of Denmark, whose Government, in 1721, helped to found, at Godhaab ("Good Hope"), on the east coast, the mission settlement of Hans Egede, a clergyman who had at heart the welfare of the natives. The coasts became known to whale-fishers, and supplied furs to a trade monopolized by Denmark. As a Danish possession this is divided into North and South Inspectorates, Godhaven, on Disco Island, being centre of the former division, and Godhaab of the latter, but Julienshaab, near the south end, appears to be the most populous place, while Upernavik is the most northerly settlement—all these on the west coast. Other names, Scoresby Sound, Franz Josef Fiord, Mount Petermann, Cape Nansen, Hayes Land, Kane Basin, and so forth, make a motley record of foreign exploration. The inhabitants put together do not come to a dozen thousand, and it is only at the ports that a little knot of Danes, a few hundreds in all, huddle together with some attempt at European fashions and comforts.

The native stock are the Eskimo, who have usually shown the virtue of being cheerful, and friendly, at all events harmless, to white men; and in Greenland, with few exceptions, they make submissive subjects to Denmark. Here, indeed, their blood is half-Scandinavian, the cross rather dragged down towards savagery than elevated by mixture. Snuff-taking or smoking is their civilized luxury, and their darling dissipation the romping dances taught them by sailors. They have given up some native customs, such as that of rubbing noses in salutation; they have for the most part become docile pupils of Lutheran and Moravian missionaries, and show a quick ear for music in adaptation of Christian hymns; but their civilization seems not so deep as their dirt, for they cherish superstitious fancies by which every strange

creature, such as a cuttle-fish wandering into their waters, is readily taken for a bogey; and the unknown interior is peopled by giants and dwarfs like those of our nursery mythology; indeed, some of the tales of mermaids, or other monstrous figures, told on our own northern coasts had probably for origin glimpses of uncouth Esquimaux seen to the waist in their almost submerged water-tight canoes that had come to be driven so far across a stormy sea. More than once an attempt has been made at a native development of Christianity, as by a prophetess and her husband who, over a century ago, gained such influence as to doom their gainsayers to death as witches; but this movement was put down by the missionaries, themselves perhaps too much inclined to play Pope over such childish disciples. A few bands wandering along the east coast are still pagans; but the rest can nearly all read and write, and a newspaper is published in their own language for their benefit.

The climate in general is much more severe than on our side of the Atlantic, where the moist Orkney and Shetland Islands lie opposite Cape Farewell, the southern point of Greenland. Most of it is a dreary desert of ice-encrusted rock, compared with which Mr. Carstensen declares that the Sahara seems hospitable. In summer come out clumps of dwarfed trees, birch and pine, alder and willow; then bees and butterflies, as if strayed from sunnier climes, may here and there be seen hovering over stretches of heath and grassy patches, on which wild flowers and a rich crop of berries are presently buried in snow. Even in winter there are flaws of mild weather, especially in the south, where it is said that hot and cold, wet and dry, are noticed to reverse

the experience of Northern Europe. An oppressive south wind, compared to the khamsin of Egypt or the sirocco of the Mediterranean, often brings a trying rise of 70 or 80 degrees in the thermometer, followed by cold gales to re-bind the land in frost. There is a considerable difference between the climate of North and South Greenland, the former having a more



Eskimo Belles, Greenland

Underwood & Underwood

rigorous winter, during which one at least knows better what to expect, and smooth travelling over the snow makes this a sociable time for the colonists. The land has stern and wild beauties of its own. Its oases of summer verdure smile all the brighter for their desolate setting. And those carved and fretted edges of rock and ice often present sublime or charming scenes,¹ especially in the deep fiords fur-

¹ " Though the whole length of the fiord was only some twenty-two miles, it surpassed anything that

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rowed by glaciers that launch glistening bergs to drift down into the perilous course of our Atlantic shipping, while their very "calving" may stir the shore waters to overwhelm the light Esquimaux canoes. The Humboldt Glacier, with a front of some three score miles of ice-cliff on the west side, is believed to be the largest on the globe.

Such as it is, the Greenlanders love their snowy land, few of them indeed, even of the colonists who still speak of Denmark as "home", knowing any other, unless when in summer they go "milking the blue cow", and, as sailors, may get glimpses of countries unblessed by such luxuries as fat

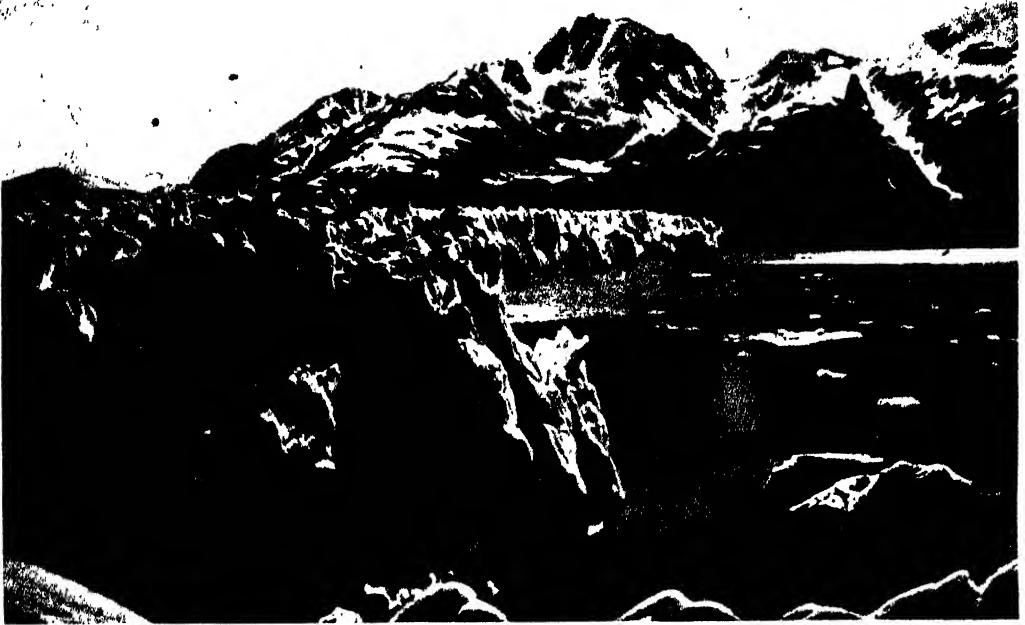
seal-meat and stinking oil. All the long winter they are cut off from intercourse with the world; then in summer come the ships that waken their harbours and trading-posts to a brief bustle of strangers, importing provisions and other goods of Europe, taking away the native wares—blubber-oil, furs, eider-down, graphite, and the aluminium-charged cryolite, these last the most valuable minerals as yet worked in a country believed to contain several metals, as well as the coal proving how it had enjoyed a more luxuriant vegetation before it passed under that glacial deluge that once spread far south upon the world.

we had yet seen in bold mountain scenery. It was not unlike the mouth of an immense carnivorous animal, whose teeth were mountains some four to five thousand feet high. As the boat proceeded, the scene changed, and the eye was attracted from one picture to another seeming to surpass it; but it was after having landed on the farthest shore that the landscape became altogether imposing. The air was transparent and calm. In the west the waters merged into the sky, both resembling an endless space wherein hills, trees, or islands were reflected as distinctly, both in outline and colour, as the objects they were a natural picture of, forming floating masses whose distance from the eye it was impossible to define, looking near and at the same

time very far. A green birch forest was in shadow on the plain where our tent was erected, and beyond that mountains of five thousand feet rose abruptly. Their summits, golden with the rays of the low sun, contrasted strongly with the deep-blue sky, and, as though to remind us of the northern latitude of the spot, the ice in their clefts glittered with a force that emphasized the depth of colour. A mysterious sound floated in the air. It came from some waterfalls, with clouds of spray flying over the vigorous greensward at their feet. Never have I beheld a place coming nearer to the idea which I imagine that our forefathers entertained of Valhalla."—A. Rus Caistenen's *Two Summers in Greenland*.



Eskimos in Canoes (Kayaks), off the Greenland Coast



The Great Muir Glacier, whose face is continually crumbling down to choke the inlet below

ALASKA

Some apology seems called for as to including Alaska in the Arctic region. Beyond the Arctic Circle lies only the northern part of this projecting corner of America, which for half a century has been a possession of the United States. But from them it is cut off by a stretch of the British Columbian coast; and it is still so much of a dependency, with characteristics so mainly Arctic, that we may treat this territory apart from the great republic to which it belongs.

The country had but a thin fringe of Russian settlement, till, in, 1867, the United States bought it from Russia at what seems the cheap rate of less than a farthing an acre. The purchase, then derided as "Uncle Sam's ice-box", was nearly 600,000 square miles, a loosely-measured area about equal to Germany, France, and Britain put

together, a generation ago almost unvisited unless by Russian fur-hunters and traders, or whalers touching at its coast; and still little more than its outlines have been mapped. The nearest American ports are Tacoma and Seattle, cities of Washington State, standing, like its capital, Olympia, on the Puget Sound, that between hardly-explored mountains runs up from Vancouver Island, where British Columbia breaks the continuity of republican dominion. From these ports, and from San Francisco, parties of summer excursionists are carried to visit the magnificent panorama of the southern edge, which has become for much-travelling Americans, on its grander scale, what the Highlands were for Britons of Scott's generation, or the scenery of the Norwegian coasts for our tourists of to-day.

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Alaska makes a mainly compact bulk of bristling and deeply-indented land. The coast range of Western Canada, falling away in British Columbia, rises again in its highest summits, as it bends round the south side of that projecting corner and along the sharp Alaskan peninsula, then is submerged to stretch westward towards Asia in the long chain of the volcanic Aleutian Islands, the farthest of them the extreme point of America, about as far west as New York lies east of San Francisco. Two other ranges trend in the same general direction through the interior, falling to the Arctic shores and to the foggy Behring Sea in frozen or quagmired flats. On Behring Strait, at the north-west corner, Cape Prince of Wales stands out within forty miles of the Asian coast. The best-known part of Alaska is the south-eastern projection Americans have christened the "Panhandle", extending down the Pacific in a ragged fringe of coast and archipelago that for some three hundred miles cuts off Canada from the sea. A boundary dispute between the two countries has been adjusted much

to the dissatisfaction of the Canadians, the award giving to their neighbours a strip of land behind the deep inlets of the outer coast. This seems to be what Russia sold to the States, the policy of her fur-traders, as of ours in Hudson Bay, and of the Danish masters of Greenland, having been to bar all rivals from access to their monopoly. Other disputes about sealing around the almost uninhabited Aleutian Islands have also led to peaceful arrangements between John Bull and Uncle Sam; but the Canadians are apt to judge the motherland as lukewarm in pressing their claims.

The central feature of the country is the Yukon River, 2000 miles long, which, rising in British Columbia, bends round westward to debouch in a wide shallow delta to the south of Behring Strait, the mouth so marshy that its port, St. Michael, has had to be fixed 60 miles farther up the coast. On the north side of this river, and about its delta, the country seems mainly flat, a dreary expanse of marsh and *tundra*, such as edge the Arctic edges of Siberia, the ground hard frozen underneath, but its surface may be thawed



Douglas, Alaska: the centre of a rich gold-mining district

Underwood & Underwood

into summer carpets of grass, moss, and vividly-coloured flowers. The southern half is much more mountainous, the lower slopes dark with forests of spruce, pine, and other trees, and in summer bearing a profusion of such fruit as big strawberries, dwarf-raspberries, gooseberries, blueberries, and blackcurrants; and, as the snow melts, on its edges spring up dark-blue lupins, violets, anemones side by side with autumn flowers like asters and gentians, all eager to make the most of the precarious summer. The woods, too damp to be cleared by fires, are often found choked by fallen trunks, rotting among a dense growth of gigantic moss and prickly shrubs. West of Cook's Inlet, the largest opening in the south coast, below the volcanic peaks of the Alaskan peninsula and on its kite tail of islands the dark forests give place to the softer green of grassy slopes, where patches of timber sometimes suggest the glades of an English park. "Green Alaska" is the title given to this southern shore by Mr. John Burroughs, when he visited it in early summer.

The climate of the interior runs to extremes, but a warm Japan current modifies it in the western isles and southern bays, where the weather may remain mild up to

December, while apt to be wet and foggy for most of the year, so cool in general that the snow-line comes down very low, and great glaciers fall direct into the sea. The show part of the coast is the Panhandle strip and the bend round to the west, under the Fairweather range, all carved into countless islands, promontories, and fiords, the slopes here and there set with glaciers beside which our Swiss *Mers de glace* would seem puny. Alaska may have thousands of them in all, a hundred at least running direct into the sea. If not quite the largest glaciers in the world, these present themselves most impressively to the view of easy tourists, now "like vast white aprons flanked by skirts of spruce forest", then "like a great white serpent with its jaws set with glittering fangs"; and again they are compared to "the stretched skins of polar bears". From one inlet half a dozen at once may be seen and heard crashing into the sea. The largest glacier of this region, named the Malespina, covers 1500 square miles with a front of 50 miles, before which¹ the sea is discoloured for many a mile by its emission of "glacier milk". Another, bearing the name of Dr. Muir, the authoritative explorer of those Alaskan ice-fields,

¹ Sir H. Seton-Karr describes one of its branches as loaded at the edges, for a breadth of miles, with hills of moraine and tangled woods growing on the rugged surface, while underneath the huge ice-stream moves on, crushing another forest in its irresistible advance, and is tunnelled by rivers that from caves in cliffs of ice spout into the sea, discolouring it for miles. The Muir Glacier, according to Dr. de Filippi, chronicler of Prince Luigi's expedition, "forms an enormous plateau, ending abruptly at the water's edge in a sheer wall of ice, 1 mile in length and 250 feet high, crowned by countless pinnacles and spires. Its base is undermined by the force of the waves, and worn into numerous gullies and caverns. Every few minutes there is a cannonade of ice-blocks falling from this cliff, which, as they strike the water, throw up clouds of spray into the air. From this vast front of ice, broken and seamed as it is by innumerable crevasses, the glacier stretches inland almost level, to a huge amphitheatre fifty or sixty miles in diameter, where it is fed by nine greater and seventeen lesser ice-streams". Mr. John Burroughs tells how half a mile of the front fell at once, and how the vessel from which he could watch this spectacle rocked in the waves following explosions that shook the cabin windows. "Here is indeed a new kind of Niagara, a cataract the like of which we have not before seen, a mighty congealed river that discharges into the

bay intermittently in ice avalanches that shoot down its own precipitous front. Enormous bergs are liberated and rise up from the bottom. They rise slowly and majestically, like huge monsters of the deep, lifting themselves up to a height of fifty or a hundred feet, the water pouring off them in white sheets." In the interior Mr. H. de Windt found a picturesque nook, else like a bit of Devonshire, overhung by a glacier "suspended so insecurely between two granite peaks that it looks as though a child's touch would send it crashing into the valley below. The face of this glacier is about three hundred feet high. Loud reports, like the distant roar of heavy guns, are continually heard issuing from it, and these were at times so deafening that on one occasion we rushed out of the tent expecting to find that the whole mass had fallen from its precarious perch. The ever-changing effects of light and shade that passed over this glacier were indescribably beautiful. In dull weather the surface would be of a torquoise blue, and its crevasses the colour of a sapphire; on sunny days the entire expanse would be white, bright, and dazzling as a huge diamond; while during the twilight hours the most delicate shades of pink, mauve, and the tenderest green would sweep like a movable rainbow over the icy wilderness, that seemed so near and yet was unapproachable. One could stand for hours and watch this natural kaleidoscope."

ends in a broken wall of ice, constantly crumbling down to choke the inlet below with its ruin. Like other Alaskan glaciers, it is shrinking at such a rate that in twenty years its godfather's observations found the front receded about two miles, while only one stretch of it is still active beside a slope of dead ice buried in soil and rocks; so centuries ago it must have been far more impressive.

These two monstrous rivers of ice creep down from a mountain amphitheatre at the bend of the coast, where the highest point, Mt. St. Elias, over 18,000 feet, has a most imposing form and site that at first made it pass for the monarch of Alaskan mountains, seen over a hundred miles across the sea, rising "like an Egyptian pyramid, straight, regular, and massive, from an icy plateau of enormously extensive glaciers". It was first successfully ascended in 1897 by an expedition under the adventurous Italian, Prince Luigi, Duke of the Abruzzi, after previous attempts had failed to gain this snowy height fortified by walls of rock and trenches of ice, that upon the American and Canadian border-line crowns a chain having several other tops as high as the great Swiss mountains. Mt. Wrangel behind the coast and Mt. Logan on the Canadian side are not much short of Mt. St. Elias, which itself has come to be dethroned from its supremacy. In a range farther inland, a loftier summit, now also climbed, which should have kept its native title, Denali, but to which the name M'Kinley was given in honour of the murdered President, is put at over 20,000 feet, and provisionally taken as the highest point of North America.

Upon the broken western face of the Pacific, south of Mt. St. Elias, are the oldest settlements—Sitka, on an outer island, whence the seat of government has been transferred to Juneau, among the intricate sounds, a principal place of trade. Near this, on Douglas Island, quartz-mills had soon crushed out gold enough to pay the price of all Alaska, though only three or four dollars' worth is got from a ton of rock, nearly two thousand of them pulverized daily by hundreds of stamps working with

a racket beside which the roar of Niagara "might seem a soft hum". Northwards from Juneau, the Lynn Canal, a fiord one hundred miles long, runs up to Skagway at the head of navigation. Other towns or camps rise and fall with the eager influx or disappointment of gold-seekers. On Kodiak Island, noted for its breed of huge bears, is the ex-Russian village formerly called St. Paul; and on Annette Island is a settlement of Indians, whom a Scottish missionary has striven to save from the demoralization in which red men tinged by civilizing influences are too apt to lose their native virtues.

Most of the country is still occupied—least thinly on the coast, where fish makes their staple food—by "Siwash" Indians, shorter and lighter in hue than their kinsmen of the plains and the eastern backwoods. Dirty, lazy, and ugly, suggesting a Mongolian strain in their square heads and oblique eyes, often well developed in the upper parts of their bodies by the habit of canoe exercise, they are no great warriors and readily become dependants of the white men. The principal tribe is the Thlinkits, in the south, who speak the "Chinook" jargon used all along the northern Pacific coast. In some parts Russian is still known to the natives. Their most notable art, beyond the making of canoes, is shown in the totem posts, trees carved with fantastic figures and shapes, connected with the superstition of their noisy "Shaman" powwows. There is also a sprinkling of Chinese and Japanese immigrants, as well as half-breed descendants of Russian and other settlers. On the Arctic coasts, Indians are replaced by the more squalid and stunted Esquimaux. Missionaries—Greek, Catholic, and others—labour under most depressing difficulties to raise so degraded races, that seem like to die out before being converted. In one winter a fourth of the natives of north-western Alaska are believed to have perished from measles and pneumonia, while contact with white settlers seldom contributes to either moral or physical improvement; and the poor Indians appear only uglier and dirtier in the cast-off clothes of civilization.



Alaskan Indians in Camp

The animal life of the country, also, seems on the decline. When first explored it showed frequent tracks of bears—white, brown, and black—deer, foxes, and the shy white sheep scurrying like chamois above the timber-line; but this great head of game is being killed out or scared away from the settlements. The Government tries measures of protection to check the slaughter wrought by head-hunting sportsmen and Indians equipped with firearms. To make up for the destruction of moose and caribou, the reindeer has been introduced from Asia. Wild fowl of many kinds are at home here. Even so far north, tiny humming-birds have been seen where the marshy districts are infested with clouds of mosquitoes, under whose attacks it is declared that strong men will sometimes break down in tears, that deer leap wildly into the rivers, and that bears scratch themselves to death, maddened by pain. The waters swarmed with fish and wild fowl, with seals and sea-otters.

But the reckless activity of American and Canadian hunters threatens to exterminate the fur seals, that were once the attraction to this region, while fur-bearing creatures on land, too, grow scarcer, though in some parts the persecuted beaver still plies his building trade. Blue and silver-grey foxes, carefully reared for their valuable pelts, are now preserved on islands. Even the fishings have fallen off, where not twenty years ago Sir H. Seton-Karr saw a brook so crowded with salmon that fish appeared to be thicker than water, which hardly covered their backs as they pressed one another on to the shore.

In vast forests and mines of coal, Alaska, besides platinum, copper, and other metals, has resources as yet hardly touched. These were thrown into the background by dazzling discoveries of gold, first on the coast, then in the Yukon Valley of the centre. In 1896 attention was drawn to this region; in 1897 began the rush to the valley of the Klondike,

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a tributary on the Canadian side, where Dawson's fame for a season drained away the American settlements lower down the river—Eagle City, Circle City, so christened as being near the Arctic Circle, and Rampart City, by rocky walls of the Yukon that here take the title of "ramparts" rather than cañon. A later Alaskan El Dorado was Cape Nome, on the west coast, where the now-shrunk Nome City, "a squalid Monte Carlo", had at one time 40,000 people housed or camped about it till the yield here fell short of dazzling hopes. Other names spring up on the Yukon's tributaries, the Koyukuk from the north, and the Tanana from the south, where Fairbanks seems likely to become the chief place in the interior, especially if a projected railway comes this way from the south coast; but any mushroom growth of modern hotels and houses may soon wither away to stand like a city of the dead. Such places, indeed, were but parodies of the name of city, with rowdy music-halls and gambling-dens as their chief buildings, yet they have a chance to grow daily, as capital and machinery are brought to bear upon gold-fields where the story of California and South Africa was repeated among circumstances that made mining here a sore and perilous adventure. But no difficulties appal men in haste to be rich. One rush was to the Copper River region, in which thousands spent a year of misery, half-starved, scourged by scurvy, without finding any gold; yet vague rumours, true or false, go on luring fresh wanderers into hardly-known wilds.

Terrible were the sufferings of the early fortune-seekers, some of them little used to hardship. The shortest route to the Yukon gold-fields, 600 miles from the sea, is by the Lynn Canal, at the head of which Skagway and another small town were crowded with would-be diggers, who often stuck fast here all winter for want of means to transport their belongings onwards. Hence their road was by Indian trails, across a choice of

difficult passes—the Chilkoot, the Chilkat, and the White Pass, hardly to be attempted unless in uncertain intervals of fine weather. Thus they came down upon a chain of lakes in British territory, and then, mainly by water, could reach the Yukon. A railway over the White Pass has bridged the hardest stretch of this road. The second and longer route is by sea to Fort St. Michael, on Behring Strait, in half a dozen years grown from a decayed Russian post to a busy town lit by electric light, whence, on flat-bottomed steamers, can be made a tedious 1300 miles voyage up the Yukon, but only during the three summer months, whereas the sounds of the south coast are open all the year round. A third possible line of venturesome travel, for nearly 2000 miles by water, is from the railways now pushing beyond Edmonton. But, if the gold deposits of the Yukon hold out, American and Canadian enterprise deals so boldly with natural obstacles that we may soon see this solitude made as accessible as Vancouver.

The diggings on the Canadian side of the border will be mentioned later on. After all, the Yukon has proved no such Pactolus as was hoped by eager prospectors, many of whom were reduced to work at any commonplace job, not always forthcoming in their need; and the "cities" that rapidly sprang up on its banks have come down in the same rocket-like manner. It seems significant that Alaska's shifting population has not much increased in half a generation. At the beginning of the century the territory contained some 63,000 people, about half of them white men, who had multiplied nearly tenfold since the gold discoveries; but the last census shows little increase in these figures, while leaving out of account tens of thousands who have tried Alaska for a time without making permanent settlement in such a bleak corner of the world.



Underwood & Underwood

Canada's Virgin Prairie: a four-ox team preparing the ground for cultivation

Here is a vivid expression of physical energy, and of the primary task of the pioneer; but though the picture comes from Saskatchewan, it should be noted that the use of oxen as draught animals, which is common in the maritime provinces, is exceptional elsewhere in Canada.

CANADA

Britain's present share of North America is rather larger than the United States, the official estimate of the Canadian Dominion area being 3,745,000 square miles. Taking in Newfoundland and all Labrador, it is larger than Europe. No country has such another block of colonial possession. But if figures here go to stuff pride, it must be owned that a great part of this domain is hardly habitable. Canada is practically a belt across the continent, 3500 miles long and about half as broad; but less than a third of this breadth is peopled, unless at scattered points, or where, in the centre, immigration begins to break into promising edges of the northern wilds.

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The population, doubled in a generation, was by the last census (1911) over 7,200,000, about equal to that of Greater London; since then, a million or so has been added, chiefly by immigration. But so self-confident and sanguine are the Canadians that they expect to multiply tenfold in the next generations, when Britain may have dwindled to an island of historic note, whose best blood has gone to feed her children across the sea. It seems a hopeful sign of this population that the new-comers, most of them young and active men of all classes, from city arabs to public-school boys, are largely able to settle on the land, where it will oftenest be their own fault if

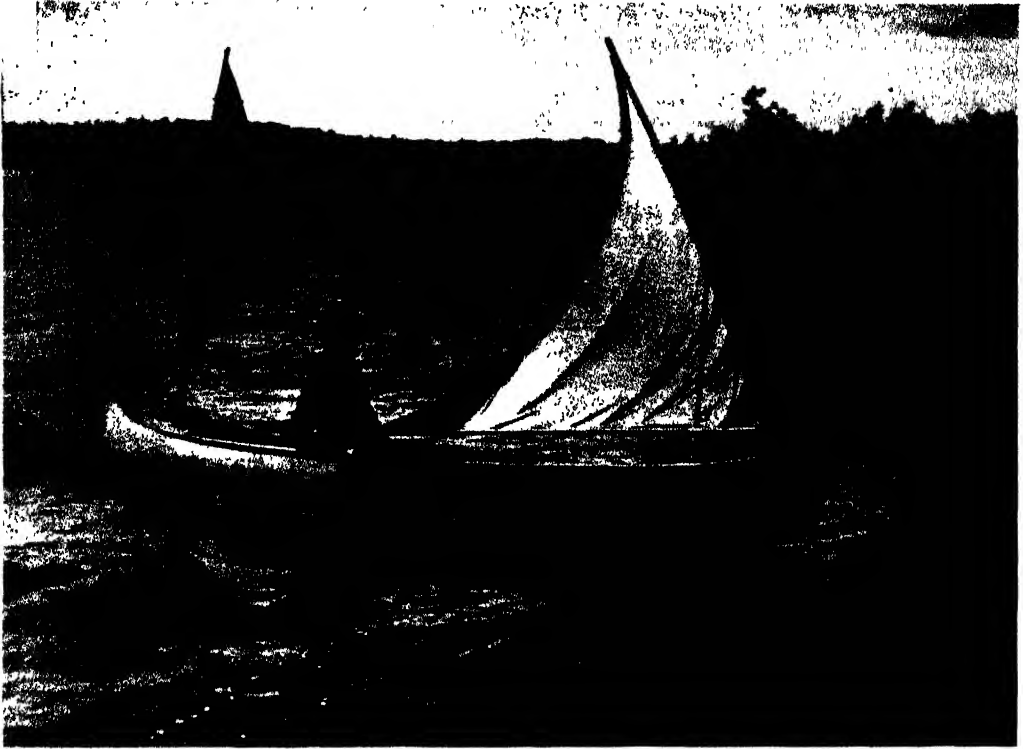
they cannot make a living. It is unfortunately to be noticed that new-comers of British birth have of late been apt to cling to the towns, old and new, in which they found employment in a period of inflated enterprise and feverish land speculation. Canada has manufacturing towns, chiefly as yet in Ontario; but her people are not, as in Australia, unwholesomely crowded into overgrown cities to be supported by socialistic devices. It is, on the whole, a manly and hopeful stock that here stands at rough grips with nature.

North and south, the continent has much the same conformation. Its colder half is politically marked off on the west side by a straight artificial line rather than the low watershed; but between the most populous parts of the Dominion and the United States the chain of Great Lakes makes a natural boundary, then the frontier farther east has been drawn not without some dispute. The two great continental mountain systems extend into Canada, and between them lie vast plains, here sloping to ice-floes and frozen rocks, instead of to sandy bays and evergreen swamps, as in the south. The central plains are mostly bare of wood, a wide opening between the forests of the east and west sides, connected across the north end by a belt of sub-Arctic timber which dwindles away on the barren shores of the Arctic Ocean. Athwart the eastern side stretches the low line of the Laurentian Hills, their name synonymous with such antiquity that the Canadian geologist can boast how, in comparison with these time-worn heights, the Alps and the Andes are but pert youngsters. The Appalachian range here shows few striking eminences, but the western mountains form a broad sea of peaks and ridges. Canada's three divisions, then, from east to west, may be broadly characterized as forest, prairie, and wooded mountain.

Their climate seems a ticklish point with the Canadians, who are inclined to resent Mr. Rudyard Kipling's invocation of the "Lady of the Snows". But the truth is, that this country, like the northern part of the States, has in general a climate of ex-

tremes, modified by local circumstances, the most powerful of them the sea, which, on the east coast, tempers, and on the west softens away the hard winter. In the centre, snow is the rule throughout the winter, and one may have to guard one's face and one's fingers from the bite of frost many degrees below zero, as in turn from the stings of mosquitoes. When the long frost breaks up, spring comes with extraordinary rapidity, the trees budding and the grass springing before the snow has all melted away; then the summer is so hot that in the south, maize, melons, grapes, peaches, and tomatoes grow freely in the open air, while wheat flourishes within a few degrees below the Arctic Circle, the sun making up in length of the days for shortness of the season. Snaps of frost, indeed, may blacken the crops before they are ripe; a haymaker has been frozen to death on the plains; and ice is often seen at the beginning of September, though in more favoured spots the winter sometimes remains open till December. Once set in, it seldom relaxes its hold in such freaks and caprices as give us cause to grumble at our Clerk of the Weather. Through storms like the icy blizzards of the plains, winter by fits proves painful and perilous; but commonly a still dry air makes it agreeable and invigorating to healthy blood. It is noticed that new-comers bear both extremes better in their first season than they may later on.

Outside of the Arctic chilly gloom, winter appears the characteristic season of Canada, because the snowed-up inhabitants lay themselves out to have a good time in what for many must be a more or less idle one, unless where there is lumber or produce to be hauled over the snow. Once its surface has hardened, the whole country is turned into a playground, about which people can skim freely in tinkling sleighs, on skates along the rivers, and over the lakes on ice yachts with sails for wings. Snowshoes like long tennis-rackets help them across the plains, heaped with dry powdery snow; toboggan runs are made artificially where no slopes offer a slide; and in cities fairy palaces are built of ice as scene for



A Canadian Canoe, under sail

Underwood & Underwood

torchlight revels. Thus winter may be turned into the merriest time for youngsters, who can enjoy months of skating, sliding, snow-balling, and other games on the ice. The Canadians are hearty at active sport, while it seems in their favour that they do not over-excite themselves about horse-racing like the Australians. The Scottish golf and curling flourish among them, as the American baseball and the British football, the latter under the adverse conditions of its season being overlaid by the long winter; but their national game was the Indian lacrosse, which indeed is reported as on the decline through the abuses of professionalism. Cricket is said not to be so much in favour, as taking up too much time; but at least in the older provinces it has its votaries.

Angling is a sport to be had within reach almost all over Canada, if its big game be driven back into the wilds by clearing of

the forests and ploughing up of the prairies. The sunny summer is broken by electrical disturbances, and by intermittent but regular rainfalls, which, with the annual melting of the snows, fill a great network of streams and lakes that are the pattern of the country. No other region has so much fresh water so widely spread over it in branching systems, mostly separated from each other by low heights of land, so that with the help of short portages from one to another, and of modern canals, they make a chain of roads through the forests, along which must be looked for the landmarks of Canadian history up to the railway era.

Summer has its annoyance in dust and mud, and in clouds of stinging creatures that infest the watery woodlands, where anglers and workers may be fain to keep their heads in a gauze bag, or to smear their faces with tar, pennyroyal, or some other strong-smelling stuff, as armour

against mosquitoes, "black-flies", and "bulldog-flies" as big as wasps, that can disable a horse. There are prairie farms where haymaking has had to be done at night, because men durst not encounter the swarms of bloodthirsty insects brought out by the sun; and the settler may have to build his home on some bare exposed spot to escape the buzzing torments of a charmingly-shaded hollow. But it can be said for Canadian insect pests that they do not poison men's blood with malarious infection as in the tropics; and while in some parts men and beasts have been driven almost mad by the torment, this plague begins to retreat from the cultivation of its breeding grounds.

One is apt to think of forests as the most familiar aspect of Canada, forgetting that new region of open plains that has been taken into use only in our time. The older Canada of our fathers was indeed a land of woods, where the cleared fields, marked off by zigzag rail fences, for which the materials are so abundant, may still be seen dotted with charred roots or stumps, measuring the thickness of the snow on which they were hewn down. A frequent feature here is the irreclaimable swamps that gather among clumps of cedar or willow with their rank undergrowth of gaily-flowering weeds. Beautiful in a strange way are the creeks half-draining such morasses, where, in contrast to the sickly grass, the pale-yellow and dull-purple flowers, the fat, flabby fungus-growths, and the rotting roots that edge banks of crumbling mould, a sluggish rush-choked stream may be half-hidden by bright water-lilies, which seem to float on the dark ooze, over bark-stained depths bottomed with piles of decaying vegetable matter and beds of slimy weeds: and the heavy air is tainted with the emanations of such a mass of decay as Browning might have painted into the surroundings of that Dark Tower to which Childe Roland came so fearsomely. And fearsome were the scenes in former days too often enacted amid those fastnesses of wild nature.

It was the wide St. Lawrence estuary that offered the first opening into the snows and

woods of Canada. Up this, as is told so well in Parkman's scholarly volumes, came French adventurers, enduring all hardships and dangers in the strength of two different spirits, some moved by hope of gain, some by Catholic zeal for the conversion of the Indians before Puritan rivals showed so much concern for saving souls not their own. Near the mouth of the great river was founded the struggling Acadian colony, while higher up, at Quebec, at Montreal, and elsewhere, the French fixed their rude settlements of Canada proper, fortified against the Indians with whom they fought and traded by turns. Like our American colonies, these grew without much help or sympathy from the mother-country's Government, which by its selfish stupidity rather put hindrances in the way of development. Feuds, jealousies, rivalries of religious orders, antipathies between religious teachers and traders, assumptions of seigneurs over dependants, corruption and inaptness of officials, went to weaken the young State. It was held together under the long pressing peril of attack by Indians, then by their English neighbours. English and French, with so much work to do in taming a wilderness, must needs carry fire and sword to each other's distant borders, intriguing with the fickle tribes, and leading cruel warriors along the waterways of the forests to scenes of murder, destruction, and torture that light up these shadowy annals with points of lurid glare.

Canada's old romance is the adventurous enterprise of traders and missionaries, that launched them on the unknown rivers west and south, exploring bit by bit far into the Prairies and down the Mississippi. In such explorations the French outstripped our people, whose open seaboard and wider range of productions kept them more attached to the east side. On the whole, the French better adapted themselves to the Indians, though indeed their feeble force had been nearly driven out by that most warlike race, the Iroquois, acting for a time as allies of the English and Dutch. The French priests, with their concrete symbols of religion and their art of coaxing

where they could not command consciences, made skin-deep converts more readily than did the metaphysical doctrines of New England Puritanism, which, to do it justice, aimed rather at quality than at quantity of conversion. The French *coureurs de bois* had less scruple than the Saxon traders in forming ties with dusky squaws, through which the two races became cemented together by the mixture of blood, nicknamed *bois brûlé*, so common in Canada. The greater influence of the French over the Indians was shown soon after our conquest of Canada in the formidable conspiracy of Pontiac, one of the few Indian chiefs who have been able to unite the jealous tribes in a common movement. But when that outbreak had been put down, we fell heirs to the good-will planted by our predecessors in Canada; and this legacy was confirmed by the just and considerate conduct of our

rule over the red man, so that for more than a century Canada knew little of the horrors of such warfare as blazed up from time to time on the Indian frontiers of the States.

In the middle of the eighteenth century came to be resolutely fought out the pretensions of the two Christian Powers to domination over the continent, where France had covered the larger area, but England had seated herself more securely. Our colonies counted more than a million of people, when Acadia, Canada, and Louisiana had not a hundred thousand white inhabitants among them. The quarrel fitfully waged by colonists and Indian allies was carried on by Royal troops on either side. Washington served an apprenticeship to war in the struggle for Pittsburg, now the Birmingham of the United States, then Fort Du Quesne, one of a chain of inland posts by which the French sought to shut in the



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Sunshine and Shadow in the Canadian Forest: youngsters hunting for beech-nuts

English settlements. British arms were at first more successful on the seaboard, where the maritime provinces fell into our hands. Inspired by Pitt's energy, our generals retrieved such disasters as that of Braddock's army led to massacre in the woods beyond the Alleghanies. Then Wolfe's daring exploit at Quebec struck a paralysing blow, when his blood and Montcalm's watered the seeds of a new nation. In 1763 France gave up her Canadian possessions to England. It seems significant that two years later the first printed book, and that a catechism, came out at Quebec, whereas New England had long had a body of divinity and other literature of her own. The first newspaper was published at Montreal in 1778, by which time it found no lack of stirring matter to record.

The expenses of the long French and Indian wars raised a hot dispute between England and her colonists, which led to the American Declaration of Independence. In this revolution the Canadians mostly stood by the Crown, and Canada became a refuge for loyalists from the revolted colonies. Thus Britain, having lost her old provinces, was left mistress of what not long before had been hostile territory, now thinly inhabited by two races of different blood and speech, whose union in one nationality has called for a cautious and considerate statesmanship that, earlier brought to bear, might have held all North America in the British brotherhood.

The two strains had a century before met on the remote snow-fields of Hudson Bay. The Hudson's Bay Company, chartered in 1670, employed as its agents hardy Orkney-men and Scots as well as the Canadian *voyageurs* and "breeds" of both stocks. This, like the East India Company, but more easily, became all-powerful over its vast trading-ground, where by firm dealing it gained the allegiance of the feeble Indian tribes. Towards the end of the eighteenth century its supremacy was threatened by the opposition of the North-West Fur Company, formed at Montreal, the latter chiefly employing *métis* of French blood, the stations of the old company being manned rather by Scots. After a bitter rivalry, sometimes

exasperated to the point of bloodshed, the two companies united in 1821, henceforth enjoying a complete monopoly over the region ruled in the name of the original body. In 1868 the Hudson's Bay Company sold its rights to the Crown, which transferred this acquisition to the new Dominion of Canada; but the company's agents are still practically masters in the unorganized territories about the Arctic Sea.

Meanwhile, Canada proper had been divided into Upper and Lower Provinces, the one mainly British, the other French. Their nascent sense of common patriotism was warmed by the American war of 1812-5, many of its stirring scenes enacted on the Lakes border. Our Reform Bill turmoil had its reflection in Canadian discontent with what seemed imperfect freedom; and insurrections broke out in both provinces. These having been put down, Lord Durham came as Governor-General charged with a mission of atonement. In 1841 Upper and Lower Canada were united with equal representation in a common Legislature. The Province of Quebec retained its old laws to some extent, though its obsolete feudal tenures were abolished. Thanks to judicious management of their susceptibilities, the French inhabitants are now loyal subjects of the Crown, unless for occasional agitations, as when in our own time the embers of French and Indian grudges were twice blown up on the north-western frontier by the half-breed Louis Riel. After the American Civil War, the Queen's peace was also broken by a futile Fenian raid, carried out by some filibustering desperadoes from beyond the frontier.

The next stage in Canadian history was the coalescing movement of all the colonies, which now began to reach to each other across the continent, touching the Pacific as well as the Atlantic and Arctic Oceans. This plan was largely carried out by Sir John Macdonald, a colonial statesman who had a curious resemblance, in looks and all, to Lord Beaconsfield. By him was also fostered the once-derided scheme of a railway from ocean to ocean, on which those loose-lying Provinces should be firmly



The Canadian Pacific Railway among the Rocky Mountains: the Yoho valley, near Field, B.C.

strung. A good deal of petty sectional jealousy had to be allayed; and the Federation, authorized in 1867 by the Imperial Parliament, was at first incomplete; but by 1873 all the provinces, except Newfoundland, were united in the Dominion of Canada, and bound together by the Canadian Pacific Railway, which across this continent forms the shortest British highway to the Pacific and the South Seas. A last tie of dependence was next broken by the withdrawal of the British garrisons from Halifax and Esquimaux at either end of the line. A little more hesitating to settle her contribution to the Imperial Navy, Canada then formed the *cadres* of an army of her own, part of it embodied for duty; and the martial temper of her sons was shown by the aid she volunteered for Britain's South African War. She developed also a strong sense of colonial patriotism, shown on "Dominion Day", 1st July, kept as the national birthday.

Her loyal allegiance to the motherland was amply shown in the Great War by an offer of half a million recruits for the Allied Armies. The prowess of this eager contingent shone bright on European battle-fields, the praise of it chequered indeed by a certain lack of discipline that cost Canadian gallantry too dear in bloodshed, and sometimes by riotous exuberance of spirits which, in the holiday hours of training-camps, could be inflamed by the temptation of drink and Canada's generous scale of pay for her young soldiers, many of whom hailed a freedom from the "dry" restrictions enforced upon them at home. They were heartily welcomed by our people, who saw a good deal of them when their want of previous training kept them back for an impatient apprenticeship in camps; but, once fitted for the front, like our other overseas auxiliaries, they earned "a place in the story" which should give them a new interest in Great Britain's glories, while

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binding her good-will more closely to her fast-growing family of free peoples.

The Canadian Constitution is a cross between that of Britain and that of the United States. From the motherland it takes its rule by a Governor-General, representing the Crown, and by his responsible Ministers sitting in a double Legislature, the senators of the Upper House appointed for life, the members of the Lower elected in proportion to population, on the basis of the "pivot province", Quebec, having the fixed number of sixty-five representatives. Mr. A. G. Bradley has taken the trouble to make out that, at the beginning of this century, a large majority of the members of both Houses bore Scottish names, attesting the influence of a stock that makes a numerical minority in the Dominion. In most of the Provinces the franchise is practically manhood suffrage; and in giving votes to women, all of them have followed the example first set by Manitoba. The Lieutenant-Governors of the provinces are appointed by the Dominion; but their Legislatures have rights of home rule as to local matters, yet under a certain control of the Dominion Government, such as over its own acts may be exercised by the Imperial Power. The criminal law follows English precedent, while Quebec retains the customs of Roman civil law brought by her settlers from France. French and English are recognized as official languages, both being used by speakers in the Dominion Parliament. Judges are appointed by the Governor-General in Council; police magistrates by the Provincial Governments. The Supreme Court has jurisdiction over questions between federal and provincial rights. In civil cases there is a final appeal to the Privy Council. The Civil Service has a fixed tenure of office, avoiding the "spoils" system that has been such a curse of American politics. The Dominion takes charge of customs, posts, communications, and national defences. Outside of the fully-organized Provinces, certain thinly-populated districts have a temporary status much like that of the American territories.

Under such a Constitution Canada has all the substance of freedom, and only the

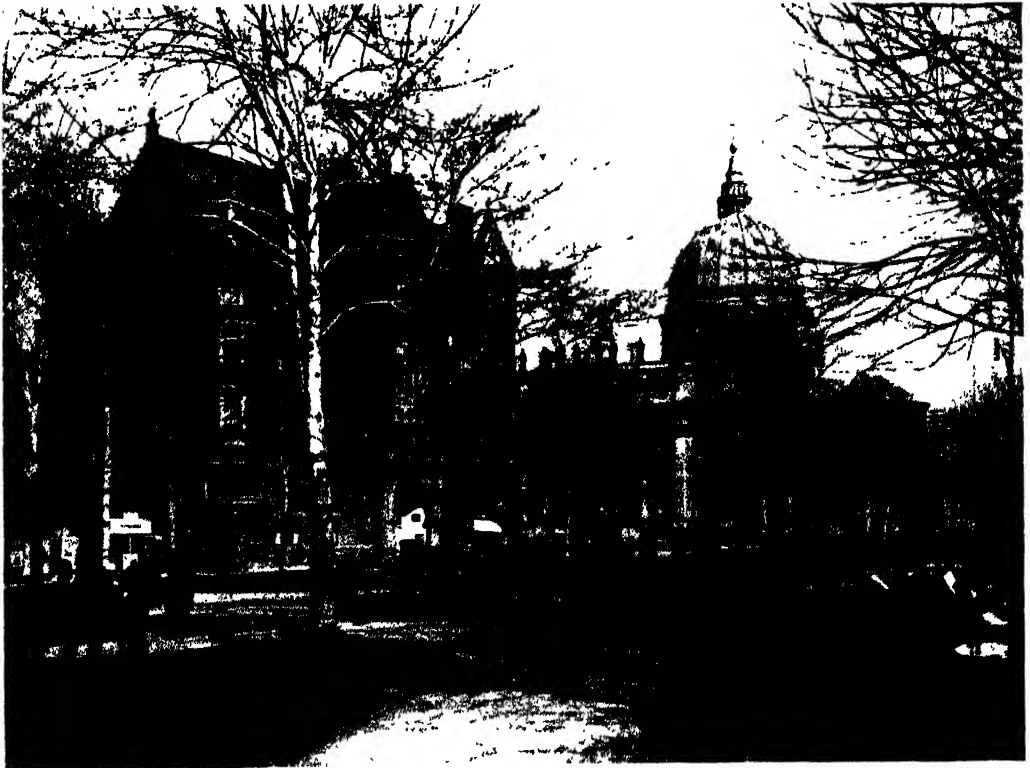
shadow of a sovereignty that may prove grateful refreshment after the glaring independence of the United States. Political feeling runs high in most parts of the Dominion, but has not been so much machine-made as on the other side of the border. "Politicians" in the young Western provinces are, as might be expected, more inexperienced, more short-sighted, and more readily accused of self-interest, while all over Canada the payment of members and the chances of jobbery tend to make politics a trade rather than a profession. Social equality is generally less assertive than in the States, manners being somewhat more toned by old-world traditions and connections.

The Canadian, in short, seems an American citizen pitched in rather a lower key. Over the largely invisible frontier there has been a certain amount of flux and reflux between the two nationalities, at one time rather to the States, but of late years the tide of immigration sets back into Canada, whose industries also increasingly invite American capital; and, if this feeling goes on, republican feeling might overgrow a not very strong loyalty, which, however, seems to have struck deeper root in the last generation. The enthusiastic reception of the Prince of Wales in 1919 is fresh in our memories. On the other hand, democratic feeling is now shown in denunciation of the titles hitherto rather sporadically bestowed here by the British Government. Canada is more and more invaded by American capital and enterprise; while the trades unions of both countries stand in close alliance that may have an effect on politics. The adhesive influence of contact with the States is counteracted by recurrent friction, by boundary disputes in which Canadian pretensions have been set aside, by bitter quarrels as to poaching on the lake fisheries and the sealing-waters of Alaska, and by the hostile tariffs with which America oppressed her neighbour's trade. On the other hand, Canada is apt to resent what she conceives the indifference of the mother-country to her sentiments; and in this mood she may remind herself of the advantages she might gain by amalgamation with the great Re-

public that is her nearest customer. It remains to be seen whether local sympathies and neighbourly antipathies will stand the strain of the economic forces that at one time more clearly appeared likely to beat down that artificial frontier. Confident predictions have been made as to the result; but we may rather follow the counsel of an American poet: "Don't ever prophesy, unless ye know". The latest prophets, indeed, seem inclined to give out independence rather than annexation as likely to be Canada's watchword in the future. A recent point of dignity for her is the royal consent to the Dominion being represented at Washington by an envoy of her own.

The two political parties of Canada, the Conservatives and the Liberals, once nicknamed "Grits", are, as usual, very apt to question each any doings of the other. Causes of internal friction are present, not

only in the inter-provincial jealousies, but also in the divisions of nationality and speech and still more those of religion, though no longer exasperated by a State Establishment, unless in the tithes secured to the priests of the Quebec Province. By its French population mainly, the Roman Catholics make the largest body of belief, the best organized, and the strongest in devotion. Next to Frenchmen, Scotsmen took the foremost part in colonizing Canada, but many of these were Highlanders of Catholic clans, who emigrated and settled in masses with their priests. One maritime district is stated to have three thousand Macdonalds; and even in Protestant Ontario there are, as in the Highlands, islands of Celtic Catholicism. The Presbyterian Church, then, does not bulk so largely as might be expected, the Methodists coming next to the Catholics in number, while the Church of England ranks



Montreal: the Y.M.C.A. Building and St. James Cathedral (Roman Catholic)

The first Young Men's Christian Association in America was organized in Montreal.

The World of To-day

below any of these, but above the Baptists. Protestant immigrants, as a rule, do not come from the class that at home clings to the walls of the Establishment with inbred affection; and here it has to compete on equal terms with rival forms of worship, officially counted by dozens throughout the Dominion. One result of this division is a great waste of energy in education, separate schools being demanded in some parts, and all the chief Churches having their own universities and colleges. Among the leading evangelical bodies, it should be mentioned, lately appears a hopeful tendency towards amalgamation or friendly co-operation.

There is a point of morals also that keeps contention boiling. Canadians of the Anglo-Saxon stock have been only too prone to drunkenness, a failing favoured by the cheapness of grain spirit, by the long dark winters when mischief is so easily found for idle hands to do, and by the friendly system of treating at bars, where one pays the same price for a large or small drink, to which one helps one's self from the bottle, then hospitable instincts lead to each of the party standing glasses round in turn. Nothing was sadder than to see hopeful young fellows ruined by such temptations, unless the miserable spectacle of "remittance men" sent out to the backwoods by their friends to drink themselves to death at a cheap rate. In general, it is the testimony of most witnesses, native-born Canadians were less enslaved to alcohol than is our populace at home; but even leading statesmen had the reputation of being drunkards by fits and starts without ruinous scandal. Intemperance, not sufficiently restrained by public opinion, called forth more or less strict measures of prohibitive legislation, as to the working of which we must refer the reader to much controversial literature. The Scott Law, granting what we call "local option", seems to have disappointed the hopes of its advocates; and further measures were tried for making Canada sober by Act of Parliament. Its temperate drink is tea, drunk in backwoods settlements at all meals, sometimes in the nerve-trying

form of green tea, to which strangers owe many a wakeful night. In 1907 Prince Edward Island set an example of total prohibition, rapidly imitated during the war; and now Ontario and other Provinces have agreed to go "dry", while Quebec stands out for a license as to wine and beer. Unfortunately this enforced sobriety seems connected with an increased indulgence in such drugs as cocaine and morphia, so common among Canadian soldiers that it led to more stringent regulations in Britain during the war.

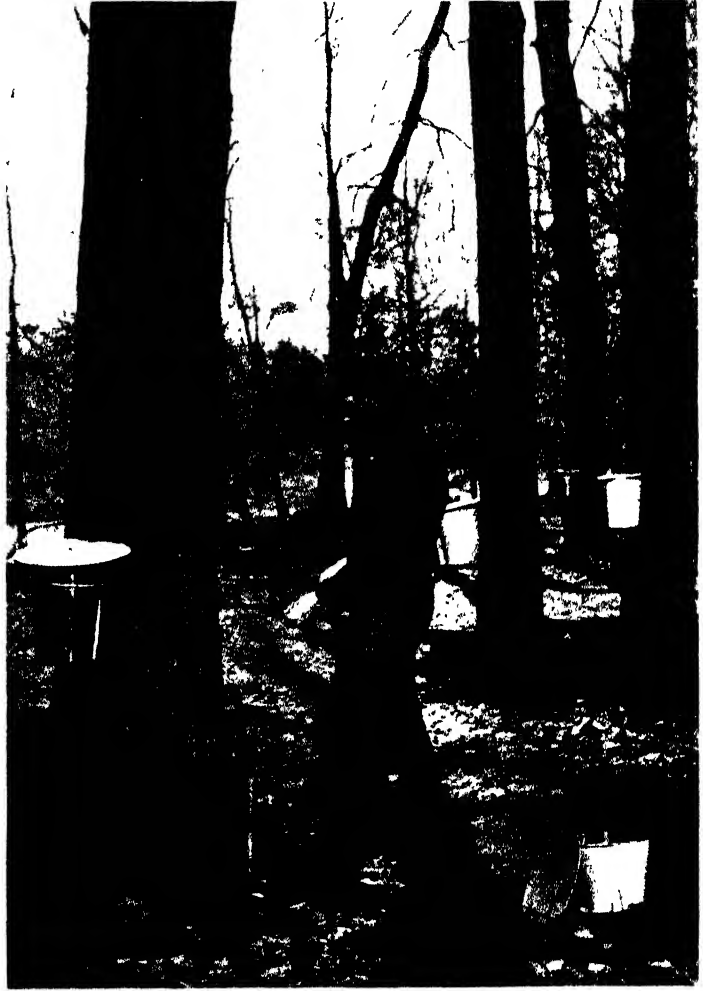
Another matter that has often made debate in Canada is the construction and course of the railway lines, by which the prosperity of any district may be more speedily developed, while another thinks itself unfairly left out in the cold. The construction of the Canadian Pacific Railway, the first transcontinental line through the Western Provinces, was carried out in a welter of political jobbery, from which more than one Canadian magnate emerged with huge spoils, gained by being "true to one party and that is himself". Before long the emigrants it brought to these new lands raised such a clamour against its monopoly of high charges, that rivals had to be admitted into the field, and there are now three main western lines, with innumerable branches spread over what half a century ago was a wilderness.

The new-comers stir up what has long been a burning question in Canada, that of Protection, as to which its Conservatives and Liberals take a differing stand, neither of them as yet proposing wholly to abolish the indirect taxation of customs duties from which the State draws its revenue. A system of high tariffs has prevailed in the interest of manufacturers, chiefly carried on in the older provinces, whereas the farmers of the new West see how less restricted trade would be to their advantage in cheapening machinery and other supplies, for which they must pay a price artificially kept up by duties against foreign competition. Freer commercial intercourse with the United States, and with the rest of the Empire has been much debated, under the diffi-

culty that the countries concerned are themselves by no means of one mind on the matter. As yet, in Canada, Protection has had the upper hand; but the Dominion's growth is so much in the agricultural riches of its West that the scale seems likely to turn sooner or later.

A special grievance of the Western Provinces is that the Federal Government here controls the distribution of the newly-opened lands, as a set-off to its aid in making the railways that have so rapidly developed them. A "Provincial Rights" party has resented this paternal management. With the exception of the first transcontinental line and a few small ones, all the Canadian railways are now nationalized under control of the Government, which undertakes the construction of new ones. Most of them were first made by private enterprise, but with the assistance and under the charter of Government; then with their progress will be bound up the administration of land-laws that also have much to say in conditions of prosperous settlement. In the new western country, virgin lands are at the disposal of the Government, which encourages railway-making by granting to the companies parts of the lands along their lines. A good deal of jobbery and speculation has been at work, on both sides the border, to secure the best bits and to enhance their price; but there are still homesteads in Canada to be had

free by settlers who will undertake to occupy and work them. The success of many small farmers so settled proves such a good advertisement that immigrants till lately were



Underwood & Underwood

Tapping Maple Trees to obtain their Sap

The Sugar Maple is abundant in Canada and the northern parts of the United States, and a single tree yields from two to six pounds in a season. The sap is manufactured into sugar, and the well-known "molasses"—much superior to that obtainable from the sugar-cane. The maple leaf is the Canadian national badge.

pouring in at the rate of hundreds of thousands a year.

Even before the Great War, a marked falling off in this influx had to be reported, following a period of commercial depression

in Canada; but in 1913 the total immigration was 418,909, of which Great Britain sent 156,984, other European countries 146,174, and the United States 115,751. The decrease seemed most notable in the flowing in of Americans over the border, which had been so great that they are now tempted to stay at home by more liberal homestead grants in some of their own Western States. In the year after the War the influx had risen again to over 100,000, and is likely to be swelled by ex-soldiers invited as settlers. With a perhaps temporary falling off in quantity, the Dominion authorities aver an improvement in quality among the newcomers. Measures are taken, as in the States, to reject undesirable immigrants; but of course there have found their way into Canada many not fit to prosper in a young country. The sort of work to be done by men who do not take off their coats to it is already pretty well filled up here; and the mere hands of factory labour will find it hard to earn a living wage, where in some ways a dollar goes no farther than half-a-crown. Anyone who knows a manual trade, or can handle a tool, were it but a spade, is at great advantage to start with; then those able to use their heads have the best chance of getting on in the end, by help of patience, endurance, and industry. There appears in Canada a certain prejudice against Englishmen as apt to be discontented, shiftless and given to drink, while Scotsmen and Irishmen prove more adaptable. The most hopeless sort of settler is he who can do nothing for himself unless grumble; but many active young men of good families and gentle breeding tackle to the rough work of the West with promising results. More than one of our public schools has here established a nursery of such *alumni* as seem more fit for the open life of a new country than for the crowded competitions of their motherland. Even well-bred girls are found get-

ting on from a position little better than that of domestic service, here at a premium; and the homesteads of the West open a crying demand for wives and mothers. More will be said farther on of the many recruits from various countries that come seeking citizenship in the Land of the Maple Leaf, that for another emblem has the industrious beaver.

Upon the welfare of Canada, as of other countries, the War has, of course, had effects hardly yet to be estimated. It found the people in a trough of commercial depression after a wave of foaming speculation. Widespread unemployment was at once relieved by the claims of recruiting and munition-making, which raised a stir of artificial prosperity. But the product of this activity went much into smoke, while it encouraged an expenditure on imports, now in larger proportion from the United States, that throve on the needs of its neighbours. As elsewhere, the loss on economically-profitless work drove the State into borrowing; and the laws of demand and supply, already tending to be discredited by a democratic generation, were suspended in the struggle between wages and prices that pushed fixed incomes and superfluous industries to the wall. The excitement of the War, with its economic results, did not fail to spread unrest, especially among such raw citizens as had brought in unpractical schemes of Socialism, nursed under foreign oppression. So Canada, like other national concerns, will have new difficulties to face in the task of returning to its financial equilibrium, roughly upset by a disastrous commotion shaking more than half the world.

So much as to the general features of this vast Dominion, whose industries, resources, scenery, and cities can best be incidentally pointed out as we pass through its Provinces, answering to the States of the American Republic.



A Lumberers' Camp, New Brunswick

THE MARITIME PROVINCES

Newfoundland, which will be dealt with later, forms a breakwater for the huge estuary of the St. Lawrence, an almost land-locked sea, forked into two channels by Anticosti Island, 125 miles long, whose public buildings are the lighthouses that do not always save befogged vessels from shipwreck on its desolate shores. This island, useless unless as a great game preserve, belongs to Quebec. On the south side of the gulf lie Canada's three Maritime Provinces, Nova Scotia, New Brunswick, and Prince Edward Island, in size equal respectively to a little less than the Netherlands, to Scotland without its islands, and to a little more than Somerset. Their area, roughly taken, made the French domain of Acadia, a name derived from the speech of the native

Indians. The first settlers were French, more than once overcome by their New England neighbours before the complete conquest of Canada.

These three Provinces, flourishing in a steady way, stand a little aloof from the national feeling of Canada. Prince Edward Island was reluctant to join the Federation, from which Nova Scotia at one time threatened to break loose, both seeming to have felt themselves overshadowed by the more marked growth of the Dominion's other members. They have together a population of under a million, mainly British, but in some parts embedding remnants of the old French settlements, and bands of tamed Micmac Indians. New Brunswick shelters a Danish colony as well as an Irish one.

Mac's are to the front, as beseems, in Nova Scotia; and all three colonies were reinforced by an immigration of loyalists from the States after the American Revolution. Differences of race and religion have provoked these Provinces to such good works as a liberal supply of colleges and schools. Their temperature varies somewhat according to situation and exposure; but in general, the climate is less extreme than that of the inland Provinces, with a good share of rain, and of fog on the coasts. Prince Edward Island is exceptional as being half-cleared for cultivation, in many parts almost like an English county in aspect as well as size. Elsewhere farms are more scattered in the woods, while some valleys are much taken up by the fruit culture that sends so many apples to English markets. The coal-fields and iron-works of Nova Scotia promise a rich future; and other minerals may prove valuable. Hitherto the chief

industries of this region have been fisheries, ship-building, and the lumber trade supplied by such vast forests as still cover a great part of New Brunswick, their recesses a paradise for hardy sportsmen, who, however, must reckon with provincial game-laws for the protection of big deer and salmon. All three Provinces have a common grievance in that both tourists and immigrants are apt to pass them by, carrying farther west the capital and labour which here might be turned to good account.

NOVA SCOTIA is mainly the eastern peninsula, shutting in the long Bay of Fundy, which parts it from New Brunswick. Hilly rather than mountainous, dotted with innumerable lakes, its rocky and varied surface might well suggest the name of New Scotland, bestowed on it as far back as the reign of James I and his son's dealings in baronetcies of that ilk. About two-thirds as large



By courtesy of C. F. R. (London)

A Panoramic View of Halifax, Nova Scotia, looking towards the harbour

Halifax is the chief winter port of Canada, its extensive harbour being ice-free and open at all seasons.

as its godmother, its narrow length of 360 miles is so environed by bays and straits as to have a sea-tempered climate, which should not bear out the nickname of "Blue Noses" given to its inhabitants by their Yankee neighbours. While the St. Lawrence is frozen up half the year, the ports of the jagged outer coast-line may still be open, unless when choked by drift-ice.

No part of the country being far from the sea, most of the Nova Scotians have fishing in their blood, and lobsters vie with apples as their chief export. The Bay of Fundy, like our Solway, has become proverbial for the violence and rapidity of its tides, flowing to the height of forty feet, and ebbing back over leagues of bare, muddy flats, reclaimed behind rows of thick dykes, with which the French settlers fortified their farms, the tops of them making rich hay-fields. Such an inrush of the ocean is caused by the funnel shape of this arm, 170 miles long, at the top forking into a double indentation of the Chignecto Isthmus that joins Nova Scotia to New Brunswick. The alluvial plains on this side are the most fertile part of the Province, noted specially for apple orchards, which send a million barrels a year to Britain, the quality of their produce being the care of a United Fruit Growers' Company, one of many such co-operative associations as are formed by farmers all over Canada. The apple, if not the lobster, might almost be the crest of Nova Scotia, had it not taken for its emblem the arbutus May-flower, as the most beautiful of its many wild blooms. Other fruits and crops flourish along with grass for cattle. An old-world peculiarity of farming here is the common use of oxen for draught, exceptional elsewhere in Canada.

On this side, in what is now a valley of orchards at the head of a narrow inlet, Annapolis or Port Royal was the French capital, which, modest as it may seem, can boast to be the oldest Canadian town, founded at the beginning of the seventeenth century. Here lived Judge Haliburton, who, in his "Sam Slick" sketches, introduced Nova Scotia to the literary world, before Longfellow gave it nobler fame in his *Evangeline*.

Still stands the forest primæval, but under the shade of its branches

Dwells another race, of other customs and language.

Only along the shore of the mournful and misty Atlantic

Linger a few Acadian peasants, whose fathers from exile

Wandered back to their native land to die in its bosom.

The masterful expulsion from Acadia, in the middle of the eighteenth century, of the French inhabitants who would not loyally accept a foreign dominion, made a theme of romantic interest. But, in fact, the life of those Norman colonists was not so Arcadian as it appeared to a poetic eye; and much plain prose might be said on the other side, this contention for one, that no country at war can afford to harbour abettors of its enemy. Grand Pré, the chief scene of their wholesale eviction, lies on a fork of the long Bay of Fundy, edged by a line of low hills ending northwards with the bold mass of Cape Blomidon. The poem does not dwell on another tragedy of this neighbourhood, a slaughter of New Englanders, surprised by the French and their Indian allies; nor upon the fact that the Acadian refugees were but ill received by their own countrymen at Quebec. When they were no longer a danger to the new masters of the country, many of them drifted back to Acadia; and now Mr. Beckles Willson states that their descendants number nearly 150,000 around the mouth of the St. Lawrence. Their chief Nova Scotian settlement is at Clare in the south-west corner, where some 10,000 of them are clustered together in a "long continuous village", surpassing the population of Yarmouth, the chief town of that end. Yarmouth treasures two "Runic stones" found here, from an inscription on one of them believed, not without question, to be relics of the early Norse voyagers to this region. A promontory tails off in Sable Island, whose sandy face an attempt is being made to skin over with verdure. Behind this, the Shelburne district was a refuge of "True Blue" American loyalists, who largely recruited the population after

the War of Independence. Higher up, the outer coast about Lunenburg became centre of a German settlement, founded by Hanoverian subjects of the Georges. At the north end there is a strong infusion of Highlanders, who have not forgotten their Gaelic, nor their tartans.

Half-way down the outer coast stands the provincial capital, Halifax, a strongly fortified city of nearly 50,000 people living under its Citadel Hill, till recently an Imperial garrison, still an important naval station, its excellent harbour enclosed by islands and by the suburb of Dartmouth on the farther side of an estuary. The "Haligonians", as they are called, began to build their city in imitation of London, but of more flimsy material, and have lately sought to grace it with a new cathedral, to replace one that made a replica of a London church, adorned with a show of monumental tablets rare in the New World. In 1917 part of Halifax was wrecked by the disaster to a ship loaded with explosives, the blowing up of which killed more than a thousand people and destroyed the homes of 25,000; but this ruin will disappear under fresh amenities.

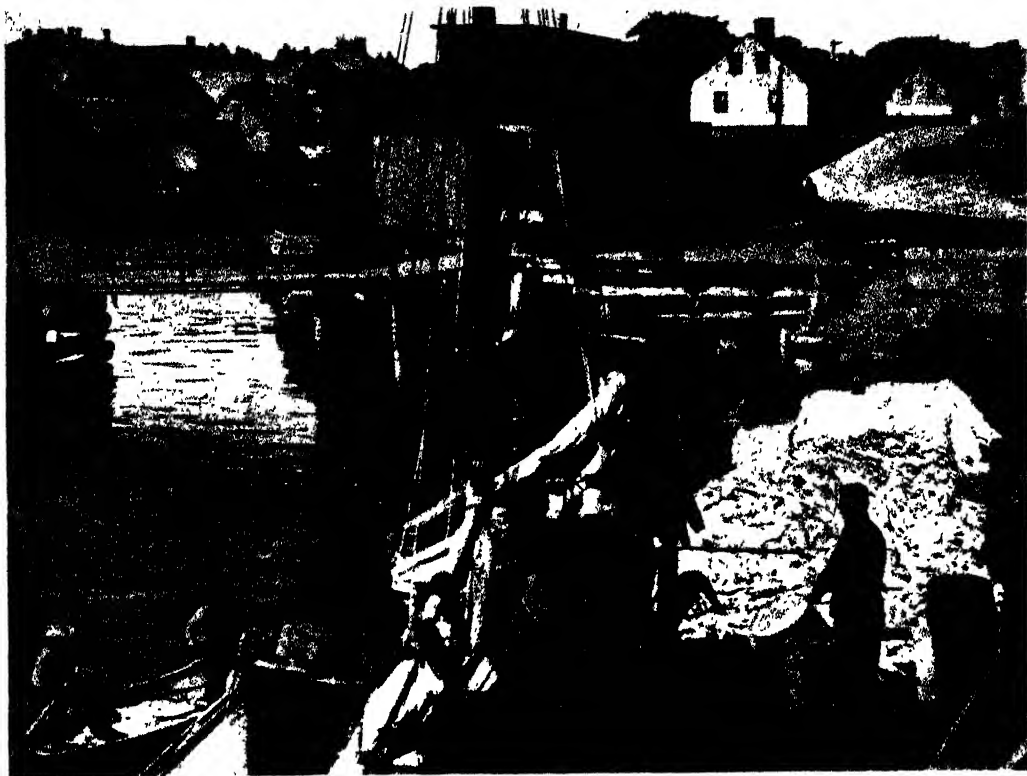
Other towns here come a good way after the capital in size. On the inner side, Truro, at the head of one arm of the Bay of Fundy, with some half-dozen thousand people, is seat of an agricultural college, as Windsor, farther down the bay, of the Anglican King's College, unfortunately burned early in 1920, and its neighbour, Wolfville, of the Nonconformist Acadian College. At the head of the other arm, Chignecto Bay, near the New Brunswick border, Amherst is rising by its industries. This, with other places in the north of the peninsula, Springhill, Pictou, and New Glasgow make centres of a mineral district, with coal seams as thick as in Lanark, near beds of iron ore now being actively worked, while Nova Scotia's once promising yield of gold has gone down.

But the busiest and grimmest part of the province seems to be its northern appendix of Cape Breton, islanded by the narrow Gut of Canso, a mass of broken shores almost divided into two islands by the arms of the beautiful Bras d'Or inlet that tempts summer

visitors from the States as well as from Canada. The French Louisbourg having fallen into decay,¹ that fortress whose capture was such a triumph for our colonial forces, Sydney is now Cape Breton's chief place, thanks to coal and iron, which have gathered an industrial population growing on to 20,000 in the town with its satellites, North Sydney, East Sydney, Sydney Mines, grouped about the fine harbour formed by the mouth of the Bras d'Or. Coal of different qualities abounds here, and from Newfoundland is brought iron ore to be turned into the steel rails that are so thickly seaming the Dominion. Other thriving industries are the production of tar, pitch, creosote, &c., from the timber with which Nova Scotia once built many ships, but now turns to iron rather as their material.

On the broken western coast of the Bay of Fundy, the St. John, chief river of New Brunswick, pours the waters of a labyrinth of inland lakes and streams through a narrow passage over what has been called a "reversible fall", the flow running the other way at high tide, and at half-tide being smoothly navigable. This peculiar fall is not the Grand Falls of the St. John that far inland make one of the lions of Canada, invested with romantic interest by a legend of two

¹ "I climbed the summit of one of the green mounds which once were citadel, bastion, ramparts and glacis. 'Here,' I could say with Parkman, 'stood Louisbourg; and not all the efforts of its conquerors, nor all the havoc of succeeding times, have availed to efface it. Men in hundreds toiled for months, toiled with lever, spade and gunpowder, in the work of destruction, and for more than a century it has served as a stone quarry; but the remains of its vast defences still tell their tale of human valour and human woe. A cow, a few lean sheep, a little group of fishermen's children are all that infest the spot and unwittingly consort with the spirits of the past. Here, at a charge of ten millions sterling, the most celebrated contemporary military engineers of France had reared a fortress without parallel in the New World. Within its ramparts dwelt some ten thousand souls. On this barren, wind-swept point nestled a busy town behind sheltering walls, crowned by a citadel and adorned by lofty buildings. Here numerous regiments in the white-coated uniform of France, naval officers, monks, missionaries, mingled with the fisherfolk and the New England traders. To-day all is silence and desolation."—Beckles Willson's *Nova Scotia*.



By courtesy of High Commissioner for Canada

Handling Fish at the Picturesque Harbour of St. Andrews, New Brunswick

squaws who saved their tribe by guiding the canoes of their Iroquois captors to destruction in this gorge of rapids. At the mouth of the river stands St. John, with over 40,000 people, the largest place of New Brunswick, its harbour kept open all the year round by the rushing Fundy tides. Like its Newfoundland namesake, this city has suffered from a great fire, out of the ashes of which it sprang up improved, and it is finding other industries to replace its building of wooden ships, not now in demand. But the capital of the Province is the much smaller Fredericton, a pretty town 90 miles up the river, which also does a good trade in the lumber that is rocky and woody New Brunswick's leading product. This has been outgrown by Moncton, which, at the head of an estuary on Chignecto Bay, seems bound to grow faster as Atlantic terminus

of the new Grand Trunk line to the Pacific. On the Gulf coast the chief places are Chatham and Newcastle, at the mouth of the Miramichi, draining a wild tract of forest. The Restigouche on the Quebec side, whose outlet opens into the great Chaleur Bay of the St. Lawrence, is another of several rivers that would make the mouth of a British salmon-fisher water. The St. Croix River, with the excellent harbour of St. Andrews at its mouth, forms the frontier of the United States, since the Ashburton treaty of 1842 allowed a great wedge of Maine to be pushed up into the lakes and forests of Canada, as is still a sore point with the Dominion. On this side Woodstock is the largest inland town, one of about 4000 people.

For its size, New Brunswick sends out more timber than any part of Canada. In

the mouths of its rivers, once clear of the rapids above, logs are formed into enormous rafts, steered down the current by sweeps, or harnessed to a tug that brings them to the timber ports. The preparation of these cargoes is a hearty toil, involving no small hardship and even peril. The gangs of "lumberers" encamp in the woods through the hard winter, far from any society but that of bears and wolves, which may come prowling about their winter quarters sniffing after savoury cooking-pots. They work in all weathers, on fare that is rough but plentiful, and must indeed be "hard as nails". The scene of their toil will not always be exhilarating. "When the sun is shining, the lofty forest hills and lake-gemmed valleys are scenes of matchless beauty—an almost silent fairy-land of white and gold, the stillness broken but infrequently by the cry of the moose bird, or of the blue jay, and the short, sharp song of the white-throated chickadee. But when snow falls it comes so thickly that the hill ranges are blotted out, while ever and anon a furious cutting wind tears through the forest, bringing down masses of snow from the tree-tops." All day long the axes echo through the frosty thickets; at night the men have at least plenty of firewood to keep them warm and cheerful in the dark solitude, where often may ring out a crack like a report of a gun, telling how Nature has done their work for them, or how the frost has broken the heart of some ancient pine. Making roads for themselves over the snow, they haul the trunks by teams of oxen to the nearest river, or shoot them down a great slide on the face of some steep hill. The thaws of spring bring this work to an end, when the hewers return home with something of the feeling of sailors after a long voyage. A party, however, must stay behind to float the logs down the streams on which they are carried to the sea. This is often the most trying and dangerous part of the business. Weeks may be passed in piloting the cargo of wood a hundred miles through gorges and rapids. Thousands of trunks will get jammed up in a narrow channel, completely blocking the course,

and the men have to plunge into icy torrents to straighten out a tangle of gigantic spillikins. Sometimes there is no other way of setting this free than for one man to be lowered upon it by a rope, to push, shove, cut or pry till the logs start loose so suddenly that his comrades must look sharp to jerk him up from being crushed by their tumbling mass. The crash of such a breaking jam can be heard for miles. Still more terrible is the bursting of an ice dam, which may choke up a river to spread its spring freshets in disastrous floods.

Another exciting experience of the forests is the fires that sometimes sweep through them. One of the greatest of such devastations on record scorched up the Miramichi region in the unusually hot summer of 1825, the terror of its flames heightened by a thunderstorm raging overhead. The conflagration spread over hundreds of miles, destroying four small towns and much of the shipping in the river. Two hundred persons, or more, met a dreadful death, vainly seeking safety in the rivers; the country was strewn with blackened corpses of man and beast, and the withered banks of the streams with dead or dying fish. The scene is described as a most appalling one, when through the stifling air a hurricane hurled masses of blazing wood to kindle new perils for the fugitives, their cries, mingled with bellowing, neighing, and howling of animals, all drowned by the roar of the encircling flames, and that, now and again, by resounding peals of thunder, as heaven and earth seemed at once to defy each other with fire and cloud.

Names like Fredericton and New Brunswick record loyalty to the present dynasty; and PRINCE EDWARD ISLAND, formerly St. John's, was rechristened after Queen Victoria's father, who did part of his soldiering in Canada. This island, 150 miles long, lying in the Gulf of St. Lawrence, off the northern coast of those maritime neighbours, makes the smallest of the Canadian Provinces, but also the most thickly populated, its red soil being unusually fertile, and so much cultivated as to be styled the "Garden

of the Gulf", a garden indeed of potatoes rather than roses. This fertility it largely owes to banks of "mussel mud" on its shores, from which the remains of bygone shell-fish are dredged up to supply manure for the fields. The island also carries a great head of sheep and does good business in cheese. It has started a new industry by the rearing in captivity of blue and silver-grey foxes, whose furs bring no small gain; but fox-hunting is not a sport here, and there is not so much room for wild game as on the wooded mainland. Though quietly prosperous, this is the one province that had a little decreased in population at the last census. Can that be associated with the fact that it was the first Canadian Province to "go dry", by a prohibition law which

almost emptied its gaols? The capital is Charlottetown (11,000),¹ on an inlet of the south coast, where Northumberland Strait separates it from the two mainland provinces by only nine miles of water, which make access rather difficult in winter. A light railway, with branches, runs along the island. If its surface is somewhat tame, its shores are roughly broken, and fishing as well as agriculture comes among its resources

Fifty miles to the north-east lies the group of the Magdalen Islands, populated almost entirely by French fishermen, and belonging to the Province of Quebec.

¹ In estimating the population of Canadian towns, the census of 1911 has been quoted where no other information was available; but it will be remembered how many of them, especially in the west, are increasing by thousands yearly.



Notman

Sluice Gates on the Nashwaak, New Brunswick

Fifteen per cent of New Brunswick's eighteen million acres are forest lands, and some of the best are along the Nashwaak and its branches. Unfortunately, little or nothing is being done to replace the timber which is being cut with new growth, but official authorities declare that the rich soil and moist climate together can be trusted to repair all damages.

QUEBEC

Lower Canada, as it came to be called for a time, made with part of Ontario the original Canada of French settlement, that New France that was the scene of so much romance and devotion. Larger than its motherland, the Quebec Province stretched for a thousand miles along the broad mouth of the St. Lawrence, the smaller half of it lying on the southern side, where the Appalachian Mountains fall into the sea in the upland Gaspé Peninsula, at one point elevated to 4000 feet. On the other side, beyond the low Laurentian Hills, that form the water-parting of Arctic and Atlantic waters, the province spreads over a rocky wild of forests, lakes, and rivers to the wilder Hudson Bay territories. The clearings and settlements lie mostly upon the great river and its tributaries, beside which strips of culture are thickly set with neat villages about their glittering church spires, white-washed cottages among gardens and orchards, and saw-mills and timber yards encroaching on woods which still cover a great part of the surface. Dairy-farming, cattle-rearing, and the making of maple sugar thrive along with the opening of the forests by troops of lumberers. The *habitants* on the northern side are mainly French, largely of Norman extraction, who cling to the faith, the tongue, and the ways of their ancestors, so that this region seems an oasis of sober simplicity and old-fashioned courtesy in the eager, restless life of Anglo-Saxon America. Feudal usages and manners die hard where long avenues of poplars sometimes suggest the landscapes of modern France. One large stretch on the other side of this river, indeed, known as the Eastern Townships, with Sherbrooke and Richmond for its chief towns, was settled by British loyalists, the "Tories" who had such a hard time of it in the American Revolution; but this, too, is invaded by the older race of colonists. "Quebec Highlanders" aired their tartans in the Great War; but at least three-quarters of the

people are French and Catholic, much influenced by the priests of their Church, who, luckily for British rule, judge their authority more secure here than might be the case under the Tricolour or the Stars and Stripes, while, indeed, there are young and sceptical heads turned to republican ideals. The whole province has a population of over two millions, steadily increased since the conquest, in spite of emigration to richer or more adventurous fields of activity. The influence of Catholicism tends to a fostering of births that seems likely to give both the Church and this Province greater weight in the Dominion. Of late years the people show a disposition to work in town factories of Canada or New England, often coming home again when they have made a little money; but there seems not much other enterprise among them to add to their own agricultural and forest industry.

The capital is the famous Quebec, "Gibraltar of America", the most picturesque city of the continent, its site setting off old-world features touched by the cunning pencil of Time, so that a traveller might here believe himself in Normandy, an illusion favoured by such sights as Calvaries or images of the Virgin at corners, by priests and nuns, by religious processions in the streets, by clattering sabots, by the big white caps of the peasant women, and by the old French *patois* commonly spoken. Strong fortress as it once was, its walls turned into a promenade, and now to be replaced by environing forts, this old city of about eighty thousand people clusters upon an abrupt rock at the confluence of the St. Lawrence and the St. Charles, the former still an ocean highway hundreds of miles above its mouth. The grim citadel crowns a mass of churches and convents, of irregular buildings, quaint gables, high-pitched tin roofs and gleaming spires that shine like silver in the sunlight, throwing a haze of enchantment on the rock fenced in



Notman

Quebec, the "Gibraltar of America": the Citadel and Château Frontenac, from Point Lévis

with grey walls. Below the Upper quarter, the Lower 'Town huddles and slopes down to wharves alive with all sorts of craft, from ferry-boats to liners, where a railway station seems an intruder; but new docks hint how Quebec has no mind to repose on her character of antiquity, though she has lost some of her business through the shifting of trade to Montreal and the disuse of wooden ships. The two parts are joined by

steep winding ways, by steps, and by an elevator that lifts one up to Dufferin Terrace, a platform best commanding the renowned view over the St. Lawrence, where once stood the Château of St. Louis, its place now taken by an hotel.¹

The charm of the city lies in its French and almost mediæval architecture, and in the moving history illustrated by its imposing fortifications. Behind the Terrace, in the

¹ "Advanced into the centre of an amphitheatre inconceivably vast, that enormous beak of rock overlooks the narrow angle of the river, and then, in every direction, immeasurable stretches of gardenized vale and wooded upland, till all melts into the purple of the encircling mountains. Far and near are lovely white villages nestling under elms, in the heart of fields and meadows; and everywhere the long, narrow, accurately-divided farms stretch downward to the river-shores. The best roads on the continent make this beauty and richness accessible; each little village boasts some natural wonder in stream, or lake, or cataract: and this landscape, magnificent beyond any in eastern America, is historical and interesting beyond all others. Hither came Jacques Cartier three hundred and fifty years ago, and wintered on the low point there by the St. Charles; here, nearly a century after,

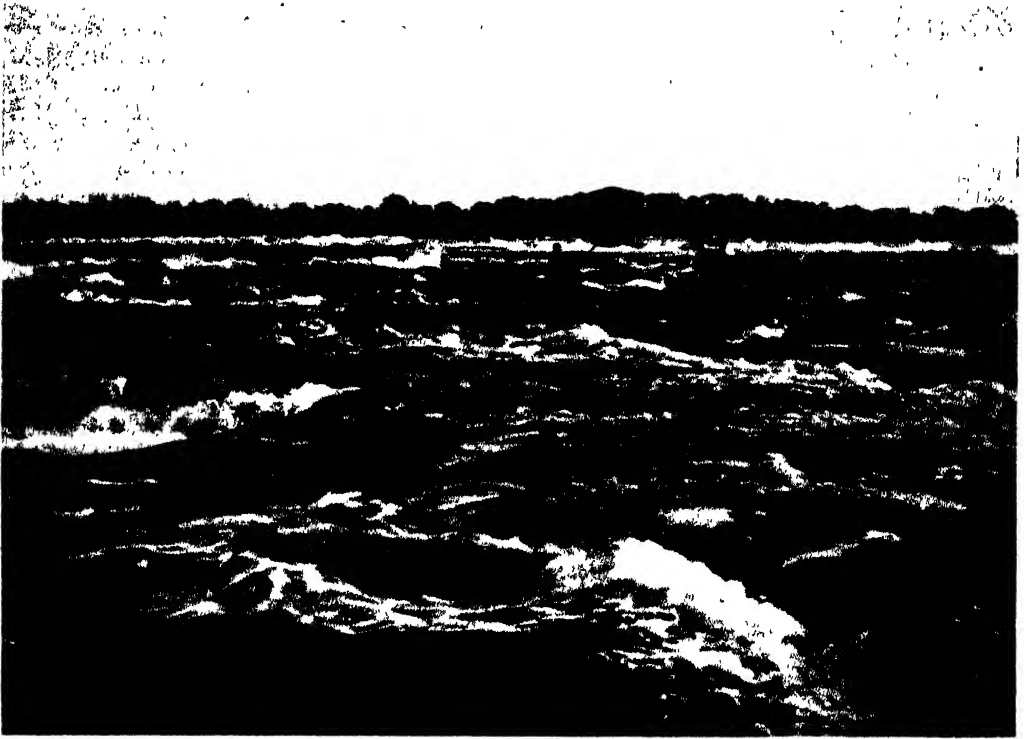
but still fourteen years before the landing at Plymouth, Champlain founded the missionary city of Quebec; round this rocky beak came sailing the half-piratical armament of the Calvinist Kirk in 1620, and seized Quebec in the interest of the English, holding it three years; in the Lower Town, yonder, first landed the coldly-welcomed Jesuits, who came with the returning French, and made Quebec for ever eloquent of their zeal, their guile, their heroism; at the foot of this rock lay the fleet of Sir William Phipps, governor of Massachusetts, and vainly assailed it in 1698; in 1759 came Wolfe, and embattled all the region, on river and land, till at last the bravely-defended city fell into his dying hand on the Plains of Abraham; here Montgomery laid down his life at the head of the boldest and most hopeless effort of our War of Independence."---W. D. Howell's *Their Wedding Journey*.

Governor's Garden, is a monument to Wolfe and Montcalm, equal in death and fame. The victor is commemorated by a tall column on the Plains of Abraham, now site of a race-course, where the descendants of old foemen play golf and lacrosse on the heights which Wolfe so boldly scaled from that cove known by his name. Montcalm is buried in the Ursuline Convent, one of several old cloisters that include an Hotel Dieu, happy name for a hospital. In contrast with them stand the new City Hall and the handsome Parliamentary Buildings of modern date, as is the Anglican Cathedral; and the Catholic Basilica represents only the site of the original church built by Champlain, founder of the city in 1608. The Catholic Laval University, named after the first bishop, its structures ranging over two centuries, is visited by tourists for its Museum and Picture Gallery containing a fine-art collection. More than one of the churches and convents show notable pictures, here a rare possession, with monuments and inscriptions sometimes proving how little the present Government resents the memories of vanquished patriotism, while the church *Nôtre Dame des Victoires* still commemorates the failure of British attacks on Quebec.

When its lions have been visited, there are delightful excursions to be taken in the environs: to Point Levis on the opposite heights, itself a considerable town, reached by ferry for a fine view of the city, and for a trip to the falls of the Chaudière River; to the well-cultivated Isle of Orleans on which Wolfe encamped; up the St. Lawrence to pretty Lorette with its fading band of Hurons; down the river, through the long village-suburb of Beauport to the narrow ravine and Falls of the Montmorency, a "perpetual avalanche", as it used to be, till exhaustingly harnessed into the service of lighting Quebec. A farther point in the same direction is the Church of St. Anne de Beaupré, where also are fine falls. St. Jean-Baptiste and St. Anne are the patron saints of Canada; and to this favourite shrine come pilgrims in tens of thousands yearly.

We cannot mention all the picturesque nooks of this Province, or the trips made from its capital, the most renowned one, perhaps, being up the gloomy gorges and towering cliffs of the Saguenay River to Ha-ha Bay, and on to its source in the circular Lake of St. John, chief of many such angling resorts in the wilds behind which has been laid out a great game preserve; but its shores have attracted a numerous settlement, reached by two railways that should be continued to the Arctic at James Bay. Down the St. Lawrence also, where from the north side its affluents come pouring over the heights in cascades, lie Murray Bay, Tadoussac, Rivière du Loup, Cacouna, and other resorts with the double charm of seaside and river scenery, in summer much frequented by American as well as Canadian visitors; but in winter these waters are blocked by ice, so that for months the light-houses may stand dark and empty.

A hundred miles wide at its mouth, the chasm of the St. Lawrence long keeps a breadth of some score miles, contracted between its bordering heights to a mile or so at Quebec, an Indian name for strait. A few miles above, it is crossed by a railway, whose first bridge came to disastrous wreck; then on an open plain the river broadens again, artificially deepened to be still navigable by large steamers as far as Montreal, 170 miles higher. The tide runs up to the old town of Three Rivers, about half-way between these two cities, where the St. Maurice comes in from the north: then the St. Lawrence opens out as the Lake St. Pierre, into which flows the St. Francis from the south. Above this opening, broken by considerable islands, Sorel stands at the mouth of the Richelieu River draining the Lake Champlain and Lake George, and making a way to that lovely New England lake-land; but in old days it was the fearsome Iroquois River, by which their fellest Indian foes pushed murderous raids among the young settlements. Thus by many tributary streams and French-named towns or villages, we come to the confluence of the Ottawa, where Montreal, growing on to half a million in-



On the St. Lawrence River: a canoe going up the Lachine Rapids above Montreal

habitants, is the largest and busiest city of Canada, and the knot of its chief railways, nearly a thousand miles from the St. Lawrence mouth.

Standing on an island formed by delta arms of the Ottawa, and stretching back to the wooded slopes of *Mont Réal*, this city was originally founded by religious enthusiasts, who named it *Ville-Marie de Montreal*. On the site of the Indian town *Hochelaga* grew up a stockaded enclosure, often attacked by the formidable *Iroquois*, and in intervals of peace made lively by a fair of furs held outside with other Indians, who long were not lightly trusted within the fortifications. Though almost as old as *Quebec*, *Montreal* has come under modern and commercial influences, so as to have lost much of its picturesque aspect, especially in the upper part of the town, while in the lower part some irregularly cramped streets still tell of its past. The best shops are in

British hands. The chief business streets are towards the river, fronted for miles by wharves and embankments; the choice residential quarter is rather on the slopes above, rising to a beautiful park on the "mountain" behind, where, from a height of 900 feet, one gets a grand view over the city with its many spires of rival creeds.

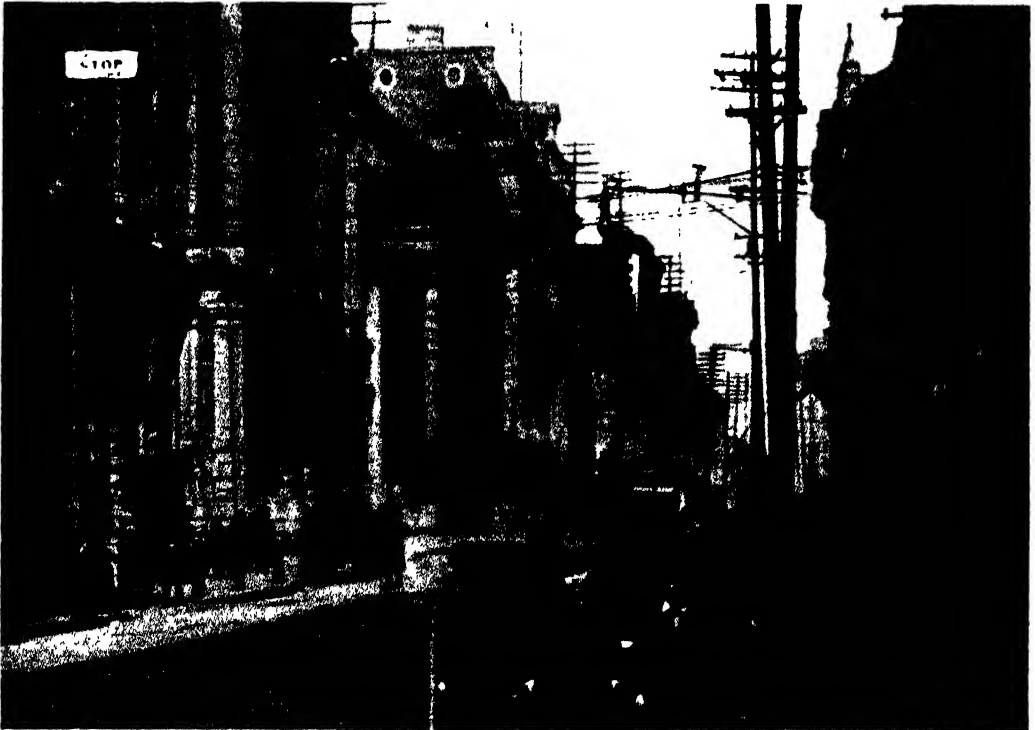
Montreal shows a marked mixture of races and interests. The better class is largely English, but a good half of the people French, besides a considerable proportion of Irish Roman Catholics, who do not fully sympathize with their fellow-believers of another tongue. How these opposite elements may form an explosive compound is shown by a singular disturbance which excited *Montreal* some half-century ago. A certain library contained a copy of one of Darwin's works banned by the Roman Catholic hierarchy. The librarian, M. Guibord, refusing to expurgate it accordingly, was excom-

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municated, and died in such a parlous state. For years went on litigation as to whether he should or should not be buried in consecrated ground. The Judicial Committee of the Privy Council finally deciding in favour of this poor corpse, the authorities found themselves at a loss how to carry out the law in face of popular feeling, stirred up by the priests. The only force they could rely upon was a small body of volunteers formed among English clerks and the like. The police, almost all French or Irish Catholics, were at heart with the mob. Orangemen from the neighbouring Province were only too willing to lend a hand in giving Montreal a Belfast Twelfth of July; but their interference might mean civil war. On the first attempt to bury the body, the funeral procession was driven back by a riotous

crowd. A second attempt might have brought about greater disorder; but that the Roman Catholic archbishop interfered on the side of the law, and the long unburied librarian was at last laid in his tomb, which rumour gave out as fortified by explosive shells against violation by indignantly-orthodox body-snatchers.

There are Irish and French Catholic churches, as well as an Anglican and a Catholic cathedral, the latter a model of St. Peter's at Rome, adorned with "the worst pictures in the world", while the church of Notre Dame is notable for its great size. There is even a synagogue of Jews, elsewhere rare in Canada, so much taken up as it is by the Chosen People of a new dispensation. Montreal unfortunately breeds a White-chapel quarter of slums and sweated labour, recruited from the most shiftless of foreign



Underwood & Underwood

Montreal, the largest and busiest Canadian City: St. James' Street

The building on the left is the Post Office, beyond which is the dignified portico of the Bank of Montreal (capital, \$18,000,000). Farther on is the Place d'Armes, where stands the famous church of Notre Dame.

immigrants. Among older convents, seminaries, and colleges, the chief educational establishment is the M'Gill University, the most richly-endowed in Canada, whose name hints at its theological associations. There are many other fine public buildings, one of the largest of them the Victoria Skating Rink, presenting lively scenes in its winter ice carnivals; and altogether Montreal has the air of a flourishing city, where the progressive element overlays the old world stratum more exposed at Quebec. Many of the historic mansions have disappeared, their site marked by tablets; and a type of the new order seems that prominent statue of Nelson in Jacques Cartier Square, named in honour of the first French explorer, who little thought how his labours were thus to end in *Sic vos non vobis*.

Among the lions of Montreal is the Jubilee Bridge that carries the railway across the St. Lawrence, here two miles broad; this has been improved and renamed from the Victoria Bridge, one of Robert Stephenson's achievements after the model of his Anglesey Britannia Bridge. Higher up, the river is crossed by the Lachine cantilever bridge, above the Lachine rapids, the shooting of which by steamers makes one of the exciting experiences of a visit to this city. Other interesting places in the vicinity are St. Anne's, at the west end of Montreal Island, the starting-place of the old fur-trading *voyageurs* ("We'll sing at St. Anne's our parting hymn"), and Caughnawaga, on the opposite bank, the home of a remnant of converted Iroquois, who have not lost all their ancestral "gifts", shown by the service a band of them rendered in our Nile Expedition of 1881.

Above Montreal the St. Lawrence expands as the Lake of St. Louis, and its free navigation is interrupted by a series of rapids, one of them 9 miles long. This obstacle is turned by a canal; but the steamers from Lake Ontario usually give their passengers the thrill of being shot through the rapids under the care of Indian pilots, a venture that is not fully appreciated till, "descending the long Sault, you look back uphill, and behold those billows leaping

down the steep slope after you". Accidents however, are rare, if not unknown. Upwards, this voyage soon brings us out of the Quebec Province, to where the great river divides New York from Ontario. On the Quebec side Ontario is bounded by the Ottawa, flowing in at the lake of St. Louis, this largest tributary of the St. Lawrence, navigable for 200 or 300 miles, its rapids also being turned by canals.

Here we may turn nearly 100 miles up the Ottawa to Canada's capital, a patch of federal territory, which lies on the Ontario side of the river from which it takes its name, yet has a "Surrey side" in Quebec. Montreal is the largest and Quebec the most dignified city of the Dominion, but Ottawa came to be set up like Washington as an artificial capital, at which the seat of Government was fixed half a century ago in view of the jealousies of the older cities. Its original name was Bytown, and scornful rivals nicknamed it the "Hole in the Woods"; but it has quickly grown into a handsome city of some 90,000 people. Finely situated at the confluence of the Rideau and Ottawa Rivers, it stands on a bluff crowned by the block of Parliament Buildings in modern Gothic style, which in 1916 was destroyed by fire, not without suspicion of traitorous incendiarism; but this noble structure has now been restored. There are other well-built institutions and public offices, among them a gallery of chiefly Canadian art, and the Roman Catholic Ottawa University. In the outskirts, the rambling mansion called Rideau Hall is the residence of the Governor-General, among seats of what might be called a Canadian aristocracy, which as yet indeed has to content itself with a certain modest reserve in its pretensions.

Besides being an official city, this is a great centre of the lumber trade, with many saw-mills and factories for turning wood-pulp into paper, a new manufacture for which Canada is at a great advantage. These industries largely belong to the town of Hull, on the Quebec side of the river, with some 20,000 inhabitants of its own. In 1900 Hull was almost destroyed by one

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By courtesy of C. P. R. (London)

Ottawa, the seat of Canadian Government: The new Parliament Buildings

of the disastrous fires so frequent in this dry climate, which swept over the river into Ottawa, and in all 15,000 persons were made homeless; but the damage became quickly repaired by means of insurance money and sympathetic contributions from Britain and the States. The mills are worked by the grand Chaudière Falls above the town, where the Ottawa, narrowed to 200 feet, pours over rocky ledges into a cauldron overhung by steaming vapour. The "Timber Slides", by which rafts are shot down here into smooth water, afford an excitement to visitors embarking on them. The Rideau Fall is another naturally fine one, also clogged by lumber-mills; and the scenery and sport of the Gatinau River, along with many beautiful cascades and lakes, invite further excursions about the seat of Canada's

lucky legislators, whence a dozen railroads radiate to all parts of the Dominion.

So far we have been looking at the older and more settled parts of Quebec, lying upon the St. Lawrence and its chief tributaries. But in 1912, its territory was doubled to about 700,000 square miles by extending its boundaries to include the peninsula of Labrador, except the coast edge held by Newfoundland, an addition that makes Quebec the largest province of the Dominion—much larger than any European kingdom, except Russia. Formerly that huge horn enclosing Hudson Bay on the east had been vaguely known as the North-East Territories, then as the district of Ungava, a name made familiar by the popular boys' book of R. M. Ballantyne, who, in his youth, was in the service here of

the Hudson's Bay Company. The district seemed hardly worth any definite boundaries, till the lesson of the Alaska dispute set the Dominion Government upon tracing a frontier line along the Newfoundland strip, in case some discovery of gold should give value to what had been little better than a no-man's land. Iron and other minerals certainly do abound, including the beautiful iridescent crystals known as labradorite, which turn up on the accessible Atlantic edge. The south part has untouched forests that may be got at to satisfy the demand for pulp wood, met by smaller trees than those valuable as timber. The north is frozen bare, and apparently yields no wealth but furs. So at present it seems as if Quebec had not added much to her resources in this imposingly enormous acquisition, a tableland of rocks, morasses, and lakes, some of considerable size, some mere rows of openings of its many rivers. A large proportion of the surface is said to be water; and the shores are so ice-bound as to have a specially severe climate.

The whole territory has less than 10,000 white settlers, *liveyerers* (live here) as they are locally called. The name Labrador itself is said to be the Portuguese *Llavrador* (peasant) from one of Cabot's comrades who first sighted this coast. These forlorn folk live poorly enough by hunting and fishing, their only crops being wild berries, roots, and scanty patches of turnip-tops. Their homes are often no better than turf huts, like those of the Eskimo. The best of their stores will be barrels of salt pork and flour. They are apt to be cheated by the dealers to whom, when in luck, they can sell some fox skin or other valuable peltry. Money they so seldom see that a recent traveller tells us how a long pair of seal-skin boots passes almost as currency among them for about a dollar and a half. There are a few thousand Algonquin

Indians and half-breeds; and on the coast a fringe of Eskimo well looked after by the Moravian missionaries who have long devoted themselves to this service. Other missionaries do not shrink from such a trying field of action, where they have to regard the bodies as well as the souls of their disciples. Dr. Grenfell of the Deep Sea Mission has recently been attempting to enrich Labrador animal life by the introduction of reindeer from Lapland, among the caribou and bears that are the great game of a country whose main subsistence seems to be fresh- and salt-water fish, and its most formidable inhabitants the bloodsucking flies that infest it in summer. This experiment is said to be a success, as were much to be wished, if but for the supply of milk to people who cannot keep cattle or poultry safe from the ravenous sledge-dogs that have been their only live-stock.

As yet the interior is hardly mapped unless in outline. In 1903 Leonidas Hubbard had the ambition of crossing the peninsula, but starved to death on the attempt. His widow and his comrade Dillon Wallace were more successful in carrying out his plans; and the country has more than once been visited by Mr. Hesketh Pritchard, author of a recent large book upon it. Other explorers have been and are now at work, by whom our knowledge of this wilderness may soon be enlarged. The part least untracked is about Hamilton Inlet, a deep bay on the east coast. Into this flows the Grand River, at one point making a drop of over three hundred feet through a narrowing trough from which it spouts into a circular basin below, raising a cloud of spray a thousand feet high. This cataract, whose roar strikes dread to superstitious Indian hearts, seems by all accounts to surpass Niagara in volume of water, and to count as the most stupendous waterfall of the continent.

ONTARIO

Upper Canada, as it used to be called, is that part of the Dominion lying on the north shores of the Great Lakes, mainly populated by British immigrants, after Canada had passed away from France. In area it was about two-thirds as large as the French Province, better settled with a population now over two and a half millions, who have shown a more go-ahead disposition than their neighbours lower down. The most prosperous part of Canada has been hitherto the southern peninsula jutting out among the lakes, where, what a century ago was a mass of forests, is almost all broken up by farms and towns, roads and railways. The divisions of Quebec are represented by long straight lines running back from the river to be lost in the wilds; but southern Ontario is fully marked off into counties, and its map appears crowded with risen and rising names. Quebec still offered bounties for dead wolves, which had been almost exterminated in Ontario. To make the comparison fair, however, we must remember that the above remarks apply to the older part of Ontario, that lying between the Ottawa and the lakes, and that this province also has now a huge appendix of wilds to the north of Lakes Huron and Superior, which till lately seemed hardly worth putting into its account. Over what has been hitherto familiar as Ontario the good land is taken up, and many of the inhabitants live by manufacturing industry, while others are emigrating to the new West, whose singular fertility presses the Ontario farmers to replace their own crops by dairy produce, fruit-growing, and so forth. The lake shore region has a somewhat milder climate than the interior, and peaches, grapes, and tomatoes flourish here as well as excellent apples.

We have already visited the Dominion capital, which stands on the eastern edge of Ontario. By the line of the Rideau Canal, through the Rideau Lakes, Ottawa is connected with Lake Ontario at Kingston, a

short cut across the roundabout waterway by the Ottawa and St. Lawrence. The upper part of the St. Lawrence is a broad reach of channels among the wooded "Thousand Isles", many of them acquired by millionaires as private paradises, through which steamers pass into Lake Ontario at Kingston, the old French Frontenac, a town of over 18,000 people, that was for a time the capital of Canada, and is the seat of its Royal Military College. Into the deep recess of Quinté Bay, behind the Prince Edward Peninsula, flows the Trent, wandering deviously from one small lake to another. Picton, Belleville, and Port Hope are other harbours along the Ontario shore, with Peterborough behind them; then at the mouth of the Humber we come to Toronto, which has dropped its former English name of York, still retained by the county.

The Ontario capital, with nearly half a million inhabitants, is the second city of Canada, and intends to be the first some day. So sure is Toronto of her growth, that she has laid out her central thoroughfare, Yonge Street, all the way back to Lake Simcoe; the longest street in the world, though some thirty miles of it are only a name. Its transverse King and Queen Streets are more complete. The "Queen City", as it entitles itself, the Canadian Chicago as it might be called, is quite a modern one, well built of brick and stone, in regular lines, after the American fashion, with fine public buildings, such as its two cathedrals, its prosperous university and denominational colleges. On a flat site, it has hardly the picturesque interest of Quebec or Montreal; yet it possesses one unique feature in the park laid out on a sandy island which shuts in the harbour; and rising ground behind also offers itself to ornament. The general aspect bespeaks a stir of activity among a population where Scottish names are well to the front. If Toronto is not old enough to possess a haunted house, like Montreal, it can boast

of two attacks in the American War of 1812, and its nucleus was a French fort built in the middle of the eighteenth century.

At the head of the lake stands the second city of Ontario, Hamilton, with over 80,000 people, supported by varied industries, which give it the title "Birmingham of Canada". Hamilton has picturesque features in its miniature "mountain" and its long lake beach; then in the country behind, about Dundas, are hills and glens that bear out the Scottish names so common in Ontario. Here we come on a wrinkle of heights running north and south, dividing into two flat plains a peninsula whose charms elsewhere are rather of wood and water than of Highland scenery. The southern end of this ridge leads us to Niagara Falls, only an hour or two's railway run from Hamilton through St. Catherine's, once known as a refuge for fugitive slaves. This neighbourhood is rich in fruit, where peaches have sometimes been given to the pigs,

and wine begins to be made which may some day vie with that of Australia. Near St. Catherine's, Port Dalhousie marks the mouth of the Welland Canal, connecting Lakes Ontario and Erie, beside the impassable short river that from the latter rushes into the former below the heights of Queenston, where the Stars and Stripes face the Union Jack of Britain across a narrow passage. A little higher up, one side of Niagara Falls belongs to Canada, so that this mighty



By courtesy of C P R (London)

Among the "Sky-scrappers" of Toronto: a view of Yonge Street

water-power has been rubbing sore certain points of international dispute to be plastered by treaty.

Niagara long ranked as the greatest wonder of the world in its way; and though now its supremacy be challenged from newly-explored regions—not to speak of the Grand Falls of Labrador, the Victoria Falls of the Zambesi have five times as much water-power, and the Yosemite Fall is nearly ten times as high—it remains a

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stupendous spectacle, marked miles off by the cloud of vapour that hangs above its rush and roar heard to a great distance. Below Grand Island, breaking the Erie's short course, this river plunges forward in rapids till it reaches the shelf where, again split by Goat Island, half a mile of water pours over in sheets of thousands of tons. The cataract on the American side is rather higher (160 feet) and thinner, the stream spouting into white and green ribbons on the face of the brown rock, while on the Canadian side it forms the wider Horseshoe Fall, 2000 feet across, the one a "white Gothic screen", the other "an emerald wall". Above, a chain of bridged islands and other view-points bring the downrush before one from various points; and the mass of water leaps so far forward that it is possible to pass underneath into a misty cave of shifting lights and hues, curtained by foam and spray, an adventure that needs not only waterproof clothing, but steady foot and eye, for a slip on the wet stones would be death to the strongest swimmer in the tumultuous pool creaming among huge rocks below. For three miles, spanned by suspension bridges and edged by railways, the river foams on through a deep gorge, then gathers into a wood-walled basin of great billows and eddies called the Whirlpool, where the bodies of drowned animals may be seen floating round and round till

they are sucked out by the current, hence rushing on to Lake Ontario. One of the most imposing phases of the great cataract is when, choked by ice, the current may be diverted to the Canadian side, and the narrower American fall is bridged over so that one can walk across to Goat Island, till the jam breaks up with a crash of ice-boulders hurled over the brink, bearded with gigantic icicles.¹

The falls, once several miles lower down the river, are still imperceptibly but surely cutting down their rocky ledge, more so on the Canadian side; and the time may be calculated when they will have worked back to Lake Erie. In the meanwhile their 4,000,000 horse-power is not allowed to run to waste by a practical people, being harnessed to mills like a captive giant, led to work as far as Toronto, and set to grind out electricity for other cities on both sides. On the American side, the town of Niagara Falls was once a modest place, mainly a gathering of hotels that had for its chief business the lodging, feeding, and lighting of strangers; but here the rushing mass of water has been tapped to work factories that make an ungainly frame for the grand spectacle. The Canadian bank is less marred, where a town of 10,000 people has also been named from the Falls. On both sides, too late on one, the country is enclosed as public property, to be preserved as far as

¹ "The real secret of the beauty and terror of the falls is not their height or width, but the feeling of colossal power and of unintelligible disaster caused by the plunge of that vast body of water. If that were taken away there would be little visible change, but the heart would be gone. The American falls do not inspire this feeling in the same way as the Canadian. It is because they are less in volume, and because the water does not fall so much into one place. By comparison their beauty is almost delicate and fragile. They are extraordinarily level, one long curtain of lace work and woven foam. Seen from opposite, when the sun is on them, they are blindingly white, and the clouds of spray show dark against them. With both falls the colour of the water is the ever altering wonder. Greens and blues, purples and whites, melt into one another, fade, and come again, and change with the changing sun. Sometimes they are as richly diaphanous as a precious stone, and glow from within with a deep, inexplicable light. Sometimes the white intricacies of dropping foam become opaque and creamy. And always there are the rainbows. If you come suddenly upon the falls from

above, a great double rainbow, very vivid, spanning the extent of spray from top to bottom, is the first thing you see. If you wander along the cliff opposite, a bow springs into being in the American falls, accompanies you courteously on your walk, dwindles and dies as the mist ends, and awakens again as you reach the Canadian tumult. And the bold traveller who attempts the trip under the American falls sees, when he dare open his eyes to anything, tiny baby rainbows, some four or five yards in span, leaping from rock to rock among the foam, and gambolling beside him, barely out of hand's reach, as he goes. One I saw in that place was a complete circle, such as I never saw before, and so near that I could have put my foot on it. It is a terrifying journey, beneath and behind the falls. The senses are battered and bewildered by the thunder of the water and the assault of wind and spray; or rather, the sound is not of falling water, but merely of falling, a noise of unspecified ruin. So, if you are close behind the endless clamour, the sight cannot recognize liquid in the masses that hurl past."—Rupert Brooke's *Letters from America*.

possible in a state of nature, where a band of Indians used to play much the same part as the gipsies of England, but are now lost in a babel of touting guides and vulgar side-shows.

Here is an example of Transatlantic Governments that deserves imitation. Magnificently beautiful scenes and famous national battle-grounds, instead of being left to private exploitation, are set apart as national parks or reservations, and kept in what may be called a state of tamed wilderness. Such an experiment was first tried with the Adirondack region in northern New York, between Lake Champlain and Lake Ontario, which has been too much encroached upon by the preserves of millionaires; but a great stretch of mountains, lakes, and forests is marked off as a public hunting-ground and pleasure-resort on a truly American scale, where the people of the cities can make holiday after various

fashions, from the luxury of hotels and villas to huts and tents in the less accessible parts. As life grows intenser, man seems to feel more the need of returning, Antæus like, to draw fresh vigour from his native earth, and to tune himself again by the wild notes of nature. All over America "camping out" makes a favourite summer amusement with the young and active, who find picnic sport in imitating the very real hardships of their pioneer forefathers.

From Lake Ontario, which is 200 miles long, we pass up to Lake Erie, the next of the chain of great water sheets, 600 miles in circuit, but rather shallower than its neighbours, so that it sooner freezes in the hard winters of this latitude. The States of New York, Pennsylvania, and Ohio reach to its southern shores, by which goes the Erie Canal that, through Lake Champlain, gives off a waterway to the St. Lawrence's lower



Niagara in Winter: the Horseshoe Fall, from Goat Island

course. The Ontario side has marshy or wooded islands and points abounding in game, where sporting rights bring in revenue to the Government. At the west end, along the shores of Michigan, the city of Detroit took its name from the strait by which Lake Erie is connected northwards with the larger Lake Huron. This channel, opening half-way into the minor Lake St. Clair, is the south-western boundary of the Ontario peninsula.

Lake Huron, at least twice as large as Lake Erie, has a more irregular outline, broken by countless islands, the largest of them Great Manitoulin, at the north end, once a sacred scene of Indian superstition; still inhabited by Ojibbeways, tamed and converted, who, like other Indian remnants in different parts of the province, hold reserves of cultivated land and here show themselves skilful fishermen. This lake gets its name from the Hurons—the Wyandots of J. F. Cooper—who became good friends to the French, and about its shores were almost exterminated by their own truculent kinsmen, the Iroquois. On the west side it has the deep inlet of Saginaw Bay, on the east it opens into the larger recess of the Georgian Bay, landlocked in on the side of Ontario. The long ridge of a promontory given up to Indians, with the little town of Wiarton on its neck, stretches towards Manitoulin Island, so as almost to make a separate lake of this great bay.

It is not a hundred miles from the foot of the Georgian Bay to Lake Ontario. Those great sheets of water are bent almost in a circle round the peninsula that is the most settled part of Ontario, where the land is almost all taken up for mixed farming, fruit-growing, and dairy produce. On it stand several other cities, a title here conceded to places with a population over 10,000; and many as yet lesser towns also are partly supported by small factories of machinery, furniture, woollens, &c. Some towns in the south are lit by natural gas, which, with gypsum, cement, and brick clay, counts among the resources of the province. Chatham is naturally in the county of Kent, that, with its neighbour Essex, forming the south-

western promontory of the province, has a notable growth of tobacco. Near the shore of Lake Erie is St. Thomas, and behind it London, which, as be seems, stands on the Thames in the county of Middlesex, and has its Hyde Park, its Pall Mall, its St. Paul's, &c., to the due pride of its population, about 50,000. This is not the only London in America, over which one has heard of a letter so addressed wandering for months, and at length reaching its proper destination with the hint: "*Try London, England*". Through London, Ontario, goes a railway to Windsor below Lake St. Clair, opposite Detroit, some of whose republican inhabitants make their homes in this royally-named foreign quarter. Sarnia is another considerable place at the north end of Lake St. Clair, where a long tunnel takes the Canadian line into Michigan, whereas at Detroit the cars cross on a great ferry. Goderich, on the Lake Huron shore, is terminus of a line from Buffalo. Behind Hamilton, on the Grand River, stands Galt, named after that Scottish novelist, father of the "kailyard school", who had a hand in the development of Canada; then, lower down, Brantford, near which was buried the famous chief, Joseph Brant, not such a ravaging monster as he is painted in Campbell's *Gertrude of Wyoming*. Guelph, with its agricultural college, is on a tributary of the Grand; and near it Berlin was appropriately much of a German town, which, by a majority of citizens had its name changed to Kitchener in the heat of war. Farther west, on the line to the Lake Huron port Sarnia, Stratford has about 10,000 people, as has Woodstock to the south of it, not to speak of several familiar names that soon may have grown into fresh repute. Many Scottish towns and villages are here reproduced under western skies. More than forty years ago, the present writer was offered the honour of standing godfather to an Ontario settlement hard up for a name, and he has always regretted that his modesty shrank from seizing such a fair chance of immortality. Kilted volunteers defy the climate and the "mosquetry" of this province, where Orange lodges flourish, but also colonies of Catholic

Highlanders clinging to the faith they brought from "the lone shieling on the distant island". Some thousands of Iroquois are now peaceful farmers and fishers in a region over which their name was once more terrible than that of our wild Highlandmen.

On the north side of the peninsula are

Ontario Highlands is being opened up by railway enterprise. Here we come back upon a fresh outgrowth of Ontario, a triangle enclosed by the Georgian Bay, Lake Ontario on the south, and the Ottawa River on the north. This is much less thickly populated than the peninsula projecting from it among the Great Lakes, and has few towns



A Highland Stream, Muskoka Lakes District, Ontario

Grand Trunk Railway

some smaller towns, soon perhaps to be larger. On Lake Simcoe stand Barrie, so called long before "Thrums" was heard of, and Orillia, head-quarters of the Hurons, and scene of a ruthless Iroquois massacre. Above Simcoe, by Lake Couchiching, is reached the lovely lake archipelago of Muskoka, a favourite picnic resort in summer; then farther north the Algonquin Park, 100 miles of wood and water, has been enclosed as a preserve of wild game, beyond which another lake-land in the

as yet unless on or behind the lake shores, and springing up along the Canadian Pacific line in the Ottawa valley.

The south end of the Georgian Bay has long been reached by rail at Collingwood and at Owen Sound, that used to be the terminus of the C.P.R. boats service to Lake Superior. These now start from a new Port M'Nicoll on the east side of the bay, reached also by rival lines. There is a hopeful project on foot for shortening the circuitous waterway all round Ontario by a

Georgian Bay Ship Canal, which, to a great extent, has been already provided for by nature. Passing out of the north corner of the bay by French River into Lake Nipissing, and through a chain of smaller lakes, it would use the Ottawa tributaries for a short cut to Montreal in about 450 miles, of which only a small part need be artificially constructed. The war, as we might expect, has delayed the accomplishment of more than one such enterprise, which may now be carried out to bring ocean-going vessels into the heart of Canada, and save transshipment from the smaller craft that on stretches of older canal connect the Upper Lakes with the ports of the St. Lawrence.

Still more sparsely populated have been the wilder territories of the province, stretching back from the shores of Lakes Huron and Superior, hitherto divided as the districts of Nipissing, Algoma, Thunder Bay, and Rainy River. Now Ontario, like her neighbours, has pushed north her boundaries to the Hudson Bay, making her whole area over 400,000 square miles. This new conquest from nature, named Patricia in commemoration of the Duke of Connaught's governorship, is being stirred into life by three railway lines through the southern part of it. It was a vast rocky wilderness of woods and countless lakes, some of them draining into the St. Lawrence, others by the Albany River, chief among many northern streams, into James Bay, a deep inlet of Hudson Bay running up between the shores of Quebec and Ontario. Its mineral riches first called attention to this long-neglected region. At Sudbury, behind the Georgian Bay, besides copper and iron, is one of the world's two great sources of nickel-supply, the other being in the French New Caledonia. About Cobalt, on the edge of the Quebec territory, silver-mining has much prospered of late. This new township was christened after the beautiful blue ore which, before its value was known, seemed such a nuisance to German miners that it got a name from the *kobold*, figuring in legend as the tricky demon of their mines. To Lake Porcupine, farther west, gold attracted seekers who had soon to go

through a fearsome ordeal, some seventy of them being burned or drowned by a great forest fire, such as may easily be started through sparks from the locomotives that begin to scare away the game. Silver and nickel have been as yet the chief yield of Ontario's mines; but its gold output has of late increased; and the whole of this new country, as yet hardly explored, seems to be rich in coal, iron, gypsum, and other minerals.

Any day we may hear of some new boom in the mining prospects of this region. But beyond the mineral rockland, it appears to have another string to its bow in a "Great Clay Belt" stretching westward for a thousand miles with a breadth of two hundred miles, which promises good agricultural land when once cleared of trees and bush, said not to be so thick as the forests which in the older parts of Ontario have long been cut into houses and fences, cradles and coffins. Through this belt goes the new line of the Grand Trunk Pacific Railway, on its way from the east to the west coast. Farther south run the Great Northern Railway, another rival for spanning the continent, and the original Canadian Pacific that no longer has a monopoly of far western traffic. These systems are connected by a line pushed up by the headwaters of the Ottawa, past Lake Nipissing and the silver-mining district, where New Liskeard is a young town upon the banks of Lake Timiskaming, a great irregular sheet of water along the Quebec edge of Ontario. Not so large but more beautiful is reported to be its neighbour, Lake Temagami, a maze of channels and islands in the heart of a huge forest reserve, where Ontario plans to keep more than a million acres inviolate as a sanctuary of nature. But about it new lines are projected to open up thousands of miles awaiting clearance, a chance perhaps too much overlooked in the rush past of immigrants for what seems the easier task of breaking up the western prairies. Many of these western fortune-seekers come from the more settled parts of Ontario, where young men find too little elbow room for their energies; and the drain of active man-

hood is felt in a scarcity of farm labour throughout this province.

As our main line westwards, let us take what a people much given to time-saving abbreviations knows as the C.P.R., this being the oldest of the transcontinental lines and the one most in touch with the Lake shores. Some 1200 miles of its long course are across Ontario, its first stage from Montreal being by the border of Quebec, then by the towns of Ottawa and Pembroke on the Upper Ottawa River. By the rocky Lake Nipissing above the Georgian Bay it approaches the head of Lake Huron, holding inland from what seems a confluence of three lakes, where beside the United States boundary, Lake Superior drains into Lake Huron by a drop through the channel of the Sault Ste-Marie, broken by islands and rapids, most famous among them the Sault, which early traders pronounced as *Soo*, a formidable pass now made easy by canals on each side, while

the rushing waters are bridled to work mills and factories about the largest lock in the world, so that Sault Ste-Marie becomes a growing city with already some twenty thousand people. Into Lake Huron also, by the strait and island of Mackinaw, a corruption of the Indian Machillimacinac ("tortoise"), comes that long backwater, as it seems, Lake Michigan, flowing from the south, where at its head stands Chicago. It was from the Green Bay recess of Lake Michigan that, paddling up the Fox River, and making a short portage which placed them on the waters of the Wisconsin, early explorers found their way into the huge stream that bore them half through the continent. Machillimacinac, or Mackinaw, was a noted fur-station in the old days, with a fort whose English garrison came to be signally surprised and massacred by a band of Indians who, feigning a game at ball, suddenly exchanged sport for earnest, and with murderous war-whoops fell upon the



A Party of Hunters in Northern Ontario

By courtesy of Ontario Government

careless spectators. The fort at Detroit is said to have been saved from a like fate by the romantic incident of an Indian girl setting its commander on his guard against such treachery.

The "Soo" was once the great gateway of traffic with the North-West, by which adventurous fur-traders gained the waters of Lake Superior. This, so named as the uppermost of the Canadian lakes, might have been entitled Lake Supremus, for we are now able to style it the largest lake on the globe, the Victoria Nyanza, its only rival, being equal in area almost to Scotland as this to Ireland. It is 420 miles long, 160 miles at its greatest breadth, with depths over 1000 feet. In shape it is a crescent dotted by islands, and edged by thickly-wooded banks that on the Canadian shore rise into cliffs higher than any in England, but on the south side are lower, though occasionally showing grand features like the "Pictured Rocks", where a cascade dashes over a wonderfully tinted and caverned edge. Two hundred streams pour their waters into this vast reservoir, most of them insignificant, the watershed to the north being only fifty miles away. At the top of the lake, from Minnesota flows the St. Louis which, not far from the springs of the Mississippi, is thus the headstream of the St. Lawrence. The lake-water is chilly even in summer, and so beautifully transparent that in calm weather rocks and sand are seen hundreds of feet below as through glass; but again the surface can become lashed up by perilous storms or obscured by fogs. Lighthouses as well as harbours have to be provided along its shore. These crystal cisterns of the St. Lawrence are indeed inland seas, whose navigators may be exposed to seasickness as well as shipwreck. But the chief bar to navigation here as elsewhere was the rapids of their connecting channels, sometimes deftly shot by Indian canoes, but often requiring to be turned by elaborate portages, for which canal locks have been substituted.

The C.P.R. line holds on behind Lake Superior, after a time skirting its precipitous shore, till, crossing the outlet of Lake

Nipigon by the abrupt cliffs of Thunder Bay, it comes to Port Arthur, then to the adjacent Fort William, with their great grain-elevators, lumber-piles, and hints of the iron, silver, and gold-mines of this region, besides mills worked by the lofty falls of the Kaministiquia River behind. At Port Arthur a rival railway competes for busy trade, while Fort William is the headquarters station of the C.P.R., where its land and water-routes unite. To this point the transcontinental journey may be made by steam-boat up the lakes; and now, 1000 miles from Montreal, begins a new zone of the railway trip, where one's watch has to be put back an hour. The run westward takes us over such a breadth of the earth's surface that, the sun having been outrun by an hour in every fifteen degrees, the trains go by clocks adjusted successively for Eastern time, Prairie time, Mountain time, and Pacific time on the four zones. Here, indeed, the railway masterfully gives the clock twenty-four hours, counting 11 o'clock p.m., for instance, as 23 o'clock, for convenience of calculation on a week's journey.

On the next stage the distance to the Red River is done in a day, where Wolseley's expedition had to toil forward for three months. Leaving Lake Superior, the rail crosses the low watershed of the St. Lawrence in the scrubby and rocky eastern end of Ontario, a region of streams, broken by rapids and grand cataracts, morasses and innumerable lakes, largest of them the beautifully-ragged and islet-studded Lake of the Woods, 70 miles long, now draining to the Arctic Ocean. On the south side, by the United States border, the Rainy River district has some fertile lands; else, except as a summer resort among its beautiful waterways and haunts of game, this stretch was long neglected, where railway stations and saw-mills may still be the chief signs of human habitation. If Western Ontario turn out to have coal along with iron and gold, it may soon thrive busily at the expense of its picturesque aspects. Kenora, at the northern outlet of the Lake of the Woods, becomes a growing town through new gold-

fields in this region and the water-power of a thousand lakes pouring out into the Winnipeg River, in old days the difficult highway to the west.¹ But now flour-mills are seen as well as saw-mills; from the forests the train emerges upon the prairies, and from Ontario we come into Manitoba by the rich

wheat lands of the Red River Valley. The Rainy River and its lakes have twisted into slight irregularity the American frontier, that from the south end of the Lake of the Woods runs straight west along the line of 49 degrees, bounding the "Prairie provinces" of Western Canada.

¹The shooting of the rapids of so broken streams and the skill of Indian canoemen at such work have often been described, as by Sir W. Butler in his *Great Lone Land*. "There is no time for thought; the eye is not quick enough to take in the rushing scene. There is a rock here and a big green cave of water there; there is a tumultuous rising and sinking of snow-tipped waves; there are places that are smooth-running for a moment and then yawn and open up into great gurgling chasms the next; there are strange whirls and backward eddies, and rocks, rough and smooth and polished—and through all this the canoe glances like an arrow, dips like a wild bird down the wing of the storm, now slanting from a rock, now edging a green cavern, now breaking through a backward rolling billow, without a word spoken, but with every now and again a quick convulsive twist and turn of the bow paddle to edge far off some rock, to put her full through some boiling

billow, to hold her steady through some thundering chute which has the power of a thousand horses: for remember, this river of rapids, this Winnipeg, is no mountain torrent, no brawling brook, but over every rocky ledge and 'wave-worn precipice' there rushes twice a vaster volume than Rhine itself pours forth. The rocks which strew the torrent are frequently the most trifling of the dangers of the descent, formidable though they appear to the stranger. Sometimes a huge boulder will stand full in the midst of the channel, apparently presenting an obstacle from which escape seems impossible. The canoe is rushing full towards it, and no power can save it—there is just one power that can do it, and the rock itself provides it. Not the skill of man could run the boat *bow on* to that rock. There is a wilder sweep of water rushing off the polished sides than on to them, and the instant we touch that sweep we shoot away with redoubled speed."



The Harbour, Fort William (where the Land and water routes of the C. P. R. unite)



A Cowboy of the Prairies, Morley, Alberta

Underwood & Underwood

The ranches vary in extent from one to ten sections (a "section" is a square mile of 640 acres); they are owned chiefly by Englishmen or by stock companies of British capitalists.

THE PRAIRIE PROVINCES

From the centre of the Continent stretches westward, for a thousand miles or so, a generally treeless and grassy plain sloping up to the foot of the Rocky Mountains. This block of lowland extends about as far to the north, but on its southern belt becomes more roughened by hills, forests, lakes and the valleys of the great rivers that drain it to the Arctic Ocean. Till almost our own time it was looked on as scarcely habitable, a "Great Lone Land" as Sir William Butler styled it in his well-known

book of travel through this region when only half a dozen dwellings of white men dotted a line of some 1000 miles. But in the last generation it has shown such promise, chiefly in the discovery of a rich black soil growing the best wheat in the world, that it now attracts more immigrants than any part of the Dominion, and bids fair to become its most prosperous region. The chief drawback, that long kept it in the shade, is a severe climate like that of most of Canada, only "more so". In the heart

of the continent we must expect to find continental conditions, more or less affected at each side by the breath of the ocean. Here the rule is an alternation of dry extremes, violent thunder and hailstorms in the hot summer giving place to early snaps of frost and a long spell of trying winter cold, when the mercury often falls many degrees below zero in the same latitude as that of sea-guarded Britain. But such a climate, putting heartiness and hardiness on their mettle, proves by no means too rigorous for well-housed, well-fed and well-clothed white men, while it has even been found a cure for consumption, thanks to the clearness of the dry air. The cultivation of the ground is thought by old settlers to have already somewhat mitigated the cold, as it certainly avails to drive off the mosquitoes bred in the abundant waters or where sloughs easily gathered in depressions of ground trampled hard and wallowed upon by great herds of buffalo.

A century ago, the buffalo roamed thickly over those plains, giving meat, clothes and lodging to their Indian inhabitants. The Indians were nothing if not improvident, but they are less to blame for the extermination of their great game. Not to speak of well equipped sportsmen who found their way so far west, reckless speculators undertook the slaughter of the herds for the sake of their skins; then by and by their bones also became valuable to fertilize the land sprinkled with them in heaps. One crack-shot is said to have slain 5000 in a season. In one region the American authorities carried out a battue of tens of thousands on the policy of starving out troublesome redskins. By the beginning of our generation the herds had grown rare; now only a few may wander on the northern edge of the plain, besides those that have been interned for preservation in the captivity of "parks". With the buffalo went the spirit of the Indian tribes, thus reduced to dependence on the white man. "Twenty years ago", says Mr. Howard Kennedy, who passed through the early troubles of this region, "the police had to protect the white man from the Indian. To-day, they have to

protect the Indian from the white man." Just as the period of settlement began to set in, a great clearance of Indians seems to have been made over the prairie country by an unusually violent epidemic of small-pox, such as has often worked havoc among them. They now hold out in scattered or harmless bands, tolerated, despised, and often cheated by the settlers if not protected by Government agents who should look after their wants and interests. Here and there a few are educated to the point of taking "positions" as clerks or so forth—the word situation seems banned in a country where a servant must be dignified as a "help".

The first white men to appear in this region were the fearless fur-traders, here as elsewhere the pioneers of Canadian exploration. The Hudson's Bay Company, with their Scottish and Orkney agents, became the masters of the northern wilds, holding a monopoly that came to be challenged by the North-West Fur Company, served rather by French half-breeds and Indians, when its enterprise had pushed so far up the water-ways of the interior. A petty civil war broke out between the servants of those rival bodies. Amid their dissensions fell unhappily the enterprise of Lord Selkirk, a philanthropic Scot who over a century ago brought out a band of Highlanders to settle at the southern end of Lake Winnipeg. This settlement was broken up by the warfare between those hostile companies; but Selkirk returned to the attempt with a little army of old soldiers discharged after the Waterloo campaign, and recaptured the fort called after him, which thus became nucleus of the now prosperous Manitoba province.

The two Fur Companies by amalgamation made peace for half a century; then it was not their interest to encourage settlement in a wilderness as yet thinly dotted with French and Indian names. But when Canada organized itself as a Federation, acquiring the Hudson's Bay Company's rights over the North-West, Manitoba was formed into a province and settlers began to dribble in. The making of the C.P.R. brought them more numerous; but still



A Study in Contrasts, Alberta: the first homestead (on the left) and the residence that replaced it

for a generation the new enterprise a little hung fire. At the end of the century set in a rush of immigration, led by American farmers from across the border, who, already accustomed to the same severe climate, were attracted by the richness of the wheat lands here to be had for the trouble of tilling them, and perhaps by greater security for life and property than in rowdy communities of their own West.

Such deserters from the Stars and Stripes, most of them desirable citizens, many of them of British birth, were so successful in Manitoba that before long they came crossing the frontier by tens of thousands a year, till all this region seemed like to be Americanized, unless, as now appears more probable, they caught a new loyalty to the Union Jack. A good many foreigners, of various origin, have filtered in also through the States. From Britain came immigrants in rather greater numbers than the Americans, if not always so well able to make the

best of a new life. Other countries poured in numerous contingents. A colony of Icelanders was early introduced on the shores of Lake Winnipeg. A more important reinforcement was the Mennonites, a kind of German Quakers who first found asylum in Russia, but had to leave it in 1871 on account of their religious objection to military service. Other Russian dissenters followed for the same reason—the Doukhobors, who have given no small trouble to the authorities by their unpractical fanaticism. A mass of immigrants from Poland and its outskirts are lumped as “Galicians”, as those of Mediterranean countries are nicknamed “Dagos”, and Germans are, or were, “Dutchmen” in America. Jews, Dutch, Scandinavians, natives of the Balkan States, Belgians, hastened to the land of promise. Even natives of the East find their way under the name of “Syrians” to the frozen shores of Canada, where they are noted as pedlars. A small Welsh colony in

the Argentine, that had fallen out with the customs of that country, was in part transplanted to the Canadian prairies. One useful element is supplied by a large band of industrious Mormons who have built for themselves small towns in Southern Alberta, from which they send out missionaries to the benighted heathen of Europe, but no longer add to their numbers by the suppressed institution of polygamy. There is a strong setting westward of Canadian farmers to find more room for activity than they had in the older settlements. From the United Kingdom came more than the due proportion of Scotsmen, but less numerous Irishmen, who turn rather to the United States.

Thus in the first dozen years of the century, Canada took in more than two million new citizens, most of whom made for its hopeful West; and before the war this influx went on at a rate of 200,000 or so a year. A majority of these arrivals were not of British birth, and it is an important consideration whether the alien strains are to multiply into a mongrel race or to be wholesomely absorbed among the stock that has notably proved itself fit for self-help, self-restraint, and self-government.

Not all of these new-comers prosper; but here healthy, sensible, and industrious men have a good chance in the struggle for existence. As the land becomes surveyed it is divided into sections of a mile square, and quarter-sections of 160 acres, each making a 'homestead farm'. It is distributed by the Government, which has handed over stretches of it to the railway companies that

open them up, thus put in a position to profit by as well as to push on the advance of settlement. The rest is free, granted in quarter-sections to anyone who can pay a small fee for registration, on condition of his erecting some sort of house, living there for at least half the year, and doing something to break up the ground. The settler has to provide himself with implements and horses or oxen, to dig a well, to reckon with the chance of bad seasons; but if he has no capital, the right sort of man may get credit, or by working for better-off farmers can save up enough to start on his own account in a small way. Beginning with the shelter of a modest "shack", he goes on to build a more substantial house, to enclose his farm in wire fences, to acquire stock; and, when he has got the land into good working order, he will be able to sell it to some agriculturist of more means and less hardy patience, himself perhaps moving on to repeat the same experiment in some newly opened district.¹ The lots beside the railway lines, of course, are more valuable as facilitating transport, which is so important a condition of success. In some cases the company undertakes to set a farm agoing to be passed over in an improved state to men who can afford to escape the early drudgery. Much of the best land, in favoured situations, now commands a high price, often enhanced by speculative jobbery. The new-comer in such a raw country has to keep his eyes wide open for sharp dealers very ready to prey upon his inexperience. It is a saying here that an immigrant seldom manages to make

¹ In Mr. H. R. Whates' *Canada, The New Nation*, a good prairie farmhouse is described as "a two-storeyed building, the walls of prairie boulders, granite and other stones roughly surfaced by the hammer. The roof is of shingle, painted red. The front of the house faces south, and at this side is a verandah, enclosed at one end by a framework of coloured glass. The entrance through the verandah takes you into a room about thirty-five feet long by fifteen feet wide. This is divided by curtains. One half is the sitting-room and is carpeted. It has a sheet-iron ceiling stamped with a device which in schools of art is supposed to be decorative. The walls are painted dead-white, the woodwork of doorways and window-recesses is stained; the ceiling is bluish-grey; the carpet is yellow with a reddish flower; the curtains are crimson and yellow, and the furniture covering is also yellow. On the floor

are gorgeous mats, apparently of domestic manufacture. All Canadian sitting-rooms are more or less like that—crude and tasteless; but most of them contain an organ or harmonium, on which hymns and 'sacred songs' are played on Sundays—and on week-days. On the other side of the curtains is the dining-room, an uncarpeted room with a table, half a dozen chairs, and a map of British North America hung on the wall. At the back of this room is the kitchen. Above this storey are the bedrooms the best room carpeted, the others with mats woven with odds and ends. In each room of the house is a steam-heating apparatus, served from a boiler in the cellar beneath the kitchen." Another recent visitor to the prairies reports some two dozen pianos as having arrived at a village not two years old. Others express surprise at the extent to which prairie dwellings are provided with telephone wires.

money till he has lost all he brought with him; yet a man who can exercise prudence and patience is none the worse for having a little capital on which to build up his fortunes, while one willing to work will not go long without employment. Women, being as yet a minority in these young countries, are still surer of a chance to turn their hands to domestic work, as wives or "helps"; but their lot here is often a harder one, poorly housed and fed as they may have to be, cut off from congenial society, soon turning pale and wrinkled in the stove-heated rooms where they grow nervous and dyspeptic by too much tea-drinking, while their men-folk thrive on the wholesome stimulant of open air.

What made the name of the prairie ground was its rich growth of wheat, twenty and thirty bushels an acre, as yet without manuring, on virgin black soil that was once the bed of a great inland sea. This is still its most valuable crop in the markets of Europe, and seems likely to become more profitable as new markets are opened in Asia. But now mixed farming grows more common both on the wheat lands and on the higher and drier ground towards the Rocky Mountains, at first given up to cattle-raising. Barley, flax, oats and potatoes also do well, and grapes ripen on the 50th parallel of latitude. All sorts of new experiments are being tried, such as the cultivation of beet-root sugar, and the richer grasses of other regions. Gold is being found in some of the river beds; and coal is abundant on the west side. Where so much progress has been made in half a generation, the Prairie Provinces may well look forward to becoming not the least prosperous part of Canada.

Their prosperity of course spreads along the railways that already seam them thickly. The C.P.R. has lost its profitable monopoly of western traffic; and there are now three transcontinental lines reaching the Pacific. The Grand Trunk line from the Atlantic takes a more northerly route than the C.P.R. about which lies still the thickest zone of settlement. Between them has squeezed itself the Great Northern Railway,

coming from the head of Lake Superior to cross the C.P.R. at Winnipeg, whence the latter line throws out a long branch north-westward to Edmonton. These systems interlace by branches and connections too numerous to trace; but any recent map will show how all the southern belt of the prairies is a network of easily-made lines, which under greater difficulties now aim at spreading northwards, while to the south they connect with the railways of the United States. Thanks to wires also spread over the wilderness remote settlers may enjoy the luxury of telegrams and telephones where they have to send a long way for letters.

Along the railways spring up towns, growing in a few years from small villages of tents, tin huts, and log-shanties that a few years further back were grassy solitudes. The line passes by a string of homestead farms, each in sight of its neighbour across waving crops of wheat or other enclosures made by wire that here takes the place of the log fences farther east. The dark earth is seen turned up by furrows perhaps half a mile long. Immediately round the house a ring of land will have been first ploughed up to fence it against the prairie fires that blacken vast stretches of grass parched to hay. The railway, that is often to blame for such conflagrations, will also be guarded by a ploughed strip. A frequent feature in the flat landscape will be the ugly towers called elevators, rising "like a lighthouse in a sea of grass", built for storing and loading wheat on to railways or steamboats for carriage to markets. Here and there a gap appears in the chain of cultivation, which is as like to mean good as bad land, held up by speculators for a rise in price. Wherever a dozen children can be gathered from a few square miles, a little schoolhouse is built; and the growing villages soon show churches and chapels, as well as hotels of a sort.¹

¹ The rapidity with which such towns rise, and their concern not to hide their light under a bushel, are illustrated by Mr. H. A. Kennedy's *New Canada*; in the case of Vermilion, that from figuring on a railway map in a month grew "visible to the naked eye", and in two months had a hundred buildings. "That was in the beginning of winter. Before Vermilion entered its first summer, its citizens had

Lodging-houses these should oftener be called, for the bars of American life have not been favoured in the Canadian West, where spirits were early excluded by law; and indeed the stimulus of alcohol is not only unneeded but specially perilous in this exciting air. In the less settled districts travellers will be roughly put up, for love

plain sometimes flat as a table so far as the eye can reach, sometimes swelling up and down like waves of the sea, or rising into low hills that stand up as islands. Few trees appear except on the river-courses, or by the gleaming lakes and ponds that may break this great expanse of grass, beautifully green in spring, dappled by flowers in their



Underwood & Underwood

Cutting Wheat near Swan River, Manitoba

or money, at farmhouses, where indeed the appearance of a stranger may be a godsend.

When the ground is as yet clear of farms, the rails stretch straight across an open

organized a Board of Trade, with president, secretary, treasurer, and all complete, and the Board of Trade had published a description of the town which is enough to take away your breath. By this time it possessed a Methodist church (with Anglicans and Presbyterians about to build) a public-school, a bank, a newspaper, three hotels, three restaurants, three lumber-yards, a drug store, a furniture store, two hardware stores, four implement warehouses, a jewelry store, two butcher's shops, a flour and food store, a steam laundry, two livery stables, a liquor

season, withered to dull-brown hay by the summer heat, in the dry autumn often blackened for miles and miles by a prairie fire, and in winter one dazzling sheet of

store, a stationer's, a bakery, a boot and shoe shop three barbers, four real estate offices, two doctors, a lawyer, a dentist, an auctioneer, four contractors, a tinsmith, a plasterer, a photographer, two pool-rooms and a bowling alley. Vermilion, we learn, is a 'coming railway centre', being already a divisional point on the Canadian Northern; is 'a future county seat'; polled more votes at the Dominion by-election on 5th April than any other town in the constituency except Strathcona; and, in brief, is 'the bull's eye of the best territory on earth'."

snow. Sunrise or sunset touch the monotonous prospect to brighter sheen. "Here and there were tracts of feathery grass, with faint grey sheaths silvered by the sunlight, and broad irregular expanses of reddish-brown shrubs with crimson berries. Who could describe the rainbow radiance of the grasses as the almost horizontal sun shot rays through them, the resultant hues varying and blending in exquisite harmony as the shifting evening breezes rose and fell?" Now and then appears a glacier-borne boulder, worn smooth by the rubbing against it of rough buffalo hides. Some spots are blighted by saline scum or by the marshy quagmires called "muskeg", but most of the land is highly fertile under the plough. The black alluvial earth of the river valleys gives place to a lighter soil, still excellent for wheat-growing, and more and more turned into fields and pastures as roads and railways break up the level wilderness. Farther west, higher and drier ground is covered with sage bush, or thistly cactus among short curly buffalo grass, in summer perhaps brightened by vast beds of sun-flowers, through which the rail seems to run as on a sheet of gold. Here we come to the country where Abel rather than Cain would choose to take up land.

Wild life is sure to retreat before the rattle of long railway trains, and the introduction of domesticated animals. The plain is still often pitted with the holes of the destructive gopher, that pops into his burrow at one's approach, but on the sly makes havoc with corn and potatoes. There are many kinds of birds, and the lakes or sloughs may be seen white with flocks of wild fowl. Owls watch the traveller with solemn curiosity; a badger may scuttle out of his way; and from the grass rise little coveys of prairie chickens, high-flavoured game that make a welcome addition to the early settlers' fare. Striped garter-snakes slip across a beaten track, but are harmless to man; and all over Canada the dreaded rattle-snakes are now rare. More feared are occasional visitations of the loathsome skunk, so fair outside, so foul in his ways. The cowardly coyotes, that found sheep a welcome prey, howl

farther and farther back into the night of nature. The antelopes have been almost exterminated on the prairies, like the buffalo; for big deer we must turn towards the northern forests, and to the mountains for bears and lean grey wolves of a fiercer breed. The southern belt is no longer a field for sportsmen but for men and beasts of business.

This thousand miles stretch of plain rises imperceptibly in three steppes or terraces walled on the west by the Rocky Mountains, and on the north by more rugged country. The lowest level, on the east side, was first organized as the Province of Manitoba, which extended on to the edge of the central steppe, nearly 1000 feet higher. The further levels were for a time marked off into four districts — Assiniboia and Saskatchewan mainly on the second terrace, Alberta on the third, and Athabasca along their northern side, jointly known as the North-West Territories, with a Governor and a small representative body in common; but, while the northern stretch of this region still retains a less organized status, the rest was in 1905 given new rank as the Provinces of Saskatchewan and Alberta, each with a population multiplying by myriads yearly. To these provinces, roughly answering to the three terraces, and mainly lying upon a fertile belt within what may be called the railway basin, we confine our attention at present, the northern wilds left for notice apart.

It may be noted in general that a certain rift of sentiments and interests threatens to cut off the people of these new provinces from the older settlers in an opposition that may come to be as marked as the difference of their scenery. The young West inclines rather to Free Trade, resenting the high prices forced upon it to protect Eastern industries. The prairie settlers are more democratic in manners as well as feeling; and their affection for the motherland may well be chilled by the large proportion of foreign immigrants dumped among them, of whom the Slavs seem the least and the Scandinavians the most adaptable element. There are Cassandras to declare that East and West here may repeat a long quarrel between North and South in the United States.



Winnipeg: a holiday crowd in the main street

MANITOBA

In the centre of North America, this province was fitly styled by Lord Dufferin "the keystone of that mighty arch which spans the Continent from the Atlantic to the Pacific". It has now an area of some quarter of a million square miles, more than twice as large as Great Britain, with as yet hardly half a million of people, who however almost doubled themselves between the census of 1901 and that of 1911. The reader must bear in mind how quickly the figures of the latest census may here become inaccurate. The whole of this area seems to have been once a glacial sea, now shrunk into lakes and swamps, a considerable part of it being taken up by Lake Winnipeg, with

the neighbouring sheets of Manitoba and Winnipegosis, a mass of shallow waters carried off by the Nelson River into Hudson Bay. Lake Winnipeg is filled by the Red River of the North, flowing into Manitoba from Dakota, and joined by the Assiniboine River, whose eastward course receives the Souris (Mouse River) and other streams from heights north of the Missouri, which make a low parting between the waters of the Arctic and those drained southwards to the Mississippi.

Some way above Lake Winnipeg, at the confluence of the Assiniboine with the Red River, stands Winnipeg, the capital, that with marvellous rapidity has grown into a

city of some 200,000 inhabitants, knot of more than two dozen radiating railways replacing the old Red River cart-trains and the chains of waterways which once were high roads of the far west. In 1871 this was a village of two or three hundred people, near Fort Garry, at which Lord Wolseley put down the first rebellion of French half-breeds stirred up by Louis Riel, an easy task but for the difficulty of getting to the scene of action. Some of the discontented trekked off, like the Boers, before the advance of civilization, half a generation later to make a more serious outbreak under the same leader. At Winnipeg the pacified French remnant is mainly confined to St. Boniface across the river; which has 10,000 or so inhabitants of its own, likely to increase through the establishment here of manufacturing industries; while in the larger city live people of many origins, united in believing it destined to a great future, in preparation for which more than one of the main streets is laid out with a width of 132 feet. All travellers are struck by the fine buildings and stirring life of this young city, which among its mills and grain-stores has provided for mental culture by a university split up into denominational colleges. The Bible has to be supplied here in fifty languages; and a dozen or a score of tongues may be heard in the streets. Winnipeg is the centre of distribution for the West. Immigrants of all nations pass through it, some of the most unfit sticking here, or drifting back in the winter season, when no work is going in the country, and the city finds itself burdened with too many shiftless dependents on its charity.

There is a drop from this capital of the West to the next city of Manitoba, Brandon on the Assiniboine River, which, around its flour-mills had 14,000 people at the last census, and its neighbour Portage la Prairie about half as many; but both since then have been growing apace. These lie farther west on the railway lines, along which are many rising towns that at the next census may claim more mention. Selkirk, the original Highlanders' settlement, is but a small place near the south end of

Lake Winnipeg. On this lake, Icelandic fishermen have named their posts Hecla and Gimlie. Emerson, on the United States border, was first notable as a colony of the Mennonites, who have since "trekked" farther into the Canadian plain. The province, seamed by railways as well as rivers, is now dotted by a medley of names, French, Indian, English, Continental, given by chance or by design, often recalling the early homes of their inhabitants. Somerset, Dundee, Lorette, Russell, Runnymede, Laurier, Dauphin, Neepawa, Killarney, are a selection taken almost at random.

Most of these places have grown up since the beginning of this century, while here and there some once ambitious township shows a slight decrease. Manitoba was by the last census the most populous of the prairie provinces, and the most cultivated; but now it does not fill up at the same rate as its younger neighbours that have larger stretches of virgin soil standing open for immigrants able to pay for them in the sweat of their brows.

Not much was added to Manitoba in wealth, if a great extent in territory, when recently its bounds were pushed northwards to Hudson Bay, over the wild district of woods and lakes known as Keewatin, that had hitherto been dependent on the province as under its Lieutenant-Governor, who for years might hardly be called on to exercise his authority. Rupertsland was a name vaguely given this region in honour of the cavalier prince who became patron of the Hudson Bay Company; but this has gone out of everyday use unless as title of an archbishopric seated at Winnipeg. Of one holder of this prelacy it is told that, being well entertained at the house of a Scots Presbyterian settler in an out-of-the-way part of his diocese, he offered to repay such hospitality by christening the baby; but the parents awkwardly excused themselves: "We take it very kind of you, sir; but we would rather wait till a regular minister came round."

The extension is chiefly valuable as access to the navigation of Hudson Bay, hitherto looked on as open only two or three months

in the year; but it is hoped that well-built steamers may make their way through the ice a little more freely. A railway is now being constructed to Fort Nelson, at the mouth of the Nelson River, the outlet of Lake Winnipeg, which has such a rushing course that the best canoe route towards the lake was by the Hayes River, at whose mouth stands York, the Hudson's Bay Company's chief station. On the Nelson has been reserved for Ontario the right to an enclave putting this province also in touch with its

navigation. Farther up the coast comes Fort Churchill, at the mouth of the Churchill or English River, another highway of fur-traders, leading to the Saskatchewan basin. This also makes a port which has been proposed as fit terminus for a railway line. Of these places, and others that will spring up along the railway, much more may have to be said in a few years; but at present this extension of Manitoba by two-thirds of its former area has increased its population by only a few thousands.



By courtesy of C. P. R. (London)

Farming on the grand scale: a wheat-field near Portage-la-Prairie, Manitoba

Canada has been called "the Granary of the Empire", and at harvest-time the wheat-fields are like a sea of gold. This "Granary" extends east and west for a thousand miles to the foot of the Rocky Mountains, and about five hundred miles from south to north.

SASKATCHEWAN

The other prairie provinces lie due west of Manitoba, all three stretching from the straight United States border line to the 60th degree of latitude. The central one takes its name from the North and South Saskatchewan, flowing from the Rocky Mountains to unite at their "fork" as a river greater than the Danube, which pours on through Cedar Lake into the north end of Lake Winnipeg near where the Nelson carries away its water to the sea. Busy tongues have docked the first syllable of this Indian name, *Kissaskatchewan*, "the rushing river", which in its present form seems formidable enough, and is to be pronounced with an accent on the second and on the last syllables. Its postal abbreviation is Sask., as Alta. denotes its neighbour Alberta. The characteristics of Saskatchewan are much the same as those of the neighbour province, and its extent is about the same, 760 miles from north to south and nearly 400 miles at its broadest stretch in the south. The southern zone has the same flat or rolling plains which prove such rich wheat land that this region is fain to boast itself the "Bread-basket of the world". The "bald-headed prairie" is here and there broken by low hill ranges, sometimes well wooded, as by saltish or alkaline lakes; and on the west side a lighter soil has invited ranchers rather than farmers; but much of the land once thought less fertile turns out to be suitable for crops. To the north comes the "Park country" of mixed prairie and woodland, part of which is kept free from settlement as timber and game preserves. Farther north extends a belt of thick forest, dwindling over a wild lakeland towards the Arctic shores.

This area also is fast being filled up with towns, for the most part small as yet. Some districts are affected by a particular strain of settlers, Americans, Germans, Norwegians and so forth. The oddest of these are the Russian fanatics called Doukhobors, by their neighbours abbreviated into "Dooks", who

came as ignorant enthusiasts, vegetarians, communistic, and addicted to such vagaries as wandering off naked on pilgrimages, and refusing to pay taxes; then, when arrested by the police, they might refuse to take food, but were cured of such "hunger-striking" more roughly than were our Suffragettes. With all their peculiarities, they prove honest and industrious, and now seem to be settling down from their exalted dreams of miraculous protection, and for sublunary help have been erecting mills, buying ploughs, harrows, traction-engines, and in general taking to practical forms of co-operation that bring prosperity to their numerous villages. An "all British" colony was brought out here, chiefly from London, to have a hard time of it at first in their new surroundings, and their little town, named Lloydminster after a clergyman who was guiding spirit of the enterprise, begins to be adulterated with settlers of other nations, who approve their final choice of a site. There is a Salvation Army colony, that seems a success; and many children have been placed out in the west by such institutions as the Barnardo Homes. Another element is the Mennonites, already spoken of, who here take much the same place as the Quakers did in early American history. Some of the miscellaneous foreigners during the war gave trouble by ripples from the political commotions of Europe.

The chief settlement was at first Prince Albert, in the northern bushlands; but the capital soon came to be seated at Regina in the southern "railway belt" by the pleasant valley of the Qu'Appelle River. When the C.P.R. first reached it, this place was known as "Pile of Bones", till Princess Louise, the then Governor-General's wife, who also stood godmother to Alberta by one of her names, suggested the more dignified title of Regina for what is now a smart city of some 50,000 people, dignified by a noble Parliament House. Moosejaw, to the west, grew



Saskatchewan: a magnificent wheat crop, shoulder high

rather faster for a time; but has now been surpassed by the capital. Regina made the head-quarters of the Mounted Police, the "Riders of the Plains", who in the early days of North-Western settlement were singularly successful in keeping order over 300,000 square miles, their boast being that no man has ever been lynched, nor has any known murderer defied justice upon beats which for each constable might come to 5000 miles in a year—a very different state of things from that prevailing on the American side of the border. The story goes that a large band of recalcitrant Canadian Indians, having escaped over the frontier, were escorted back to it by a whole troop of United States cavalry, who had the surprise of giving up their charge to a couple of mounted policemen as force enough to deal with all those runaways. This body, most efficient for the early state of the North-West, is now reorganized to meet altered conditions.

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Saskatoon, in the centre of the province, is about half as large as the capital, and is the seat of its young University. Farther west, the name Battleford recalls a trying time of its early history, when this place could be styled the Lucknow of Canada. In 1885, that vain-glorious fanatic Louis Riel, after being pardoned for his first rebellion, again raised the French half-breeds of the North-West, joined by some Indians, a force made formidable through the military gifts of Gabriel Dumont. The farthest posts were abandoned; our scanty forces on the frontier seemed likely to be overpowered; and the excitement of tribes hardly weaned from war threatened a general outbreak just as the Canadian Pacific line approached its termination. The white settlers crowded within the stockades of Battleford, besieged for weeks by the Indians in a half-hearted manner; and luckily some of the warriors were prudent enough to hold aloof from the

scene of action. Help was soon on the way: in cold spring weather hundreds of volunteers from Eastern Canada were hurried up in time to relieve Battleford and scatter the Indians, whose main mischief had been the burning of farms. The rebellion was crushed, Dumont escaping to the States and Riel surrendering, this time to be hanged, to the sullen indignation of French Canadians, who looked on him as a martyr of his race. Since then the North-West has been at peace. This good result is largely due to the self-denying law by which intoxicating liquor was long excluded here, a prohibition carried out by the "Mounties" sometimes much against the grain, though they too benefited by the absence of temptations that in many cases had brought some of them down to their hard life from higher positions. The discontented half-breeds have mainly settled down about the Saskatchewan rivers, "where they live not unhappily, farming a little, hunting a little, fishing a little, freighting a little, and talking over their camp-fires not a little of the good old days when they or their fathers dwelt on the Red River and served the servants of 'the Company'." Some of them, it is said, still expect Riel's return, like a Canadian Arthur, for their deliverance.

The Indians, too, are quiet enough on their reserves, where now sometimes the whirr of a threshing-machine may be heard instead of the drumming and howling of the war-dance. Many of them indeed give pledges of good conduct by cultivating farms or taking to trade; for years whole tribes

lived by selling the bones of the buffalo that once gave them meat. From the train may be seen warriors out of work, on their *cayuse* ponies and the *bronchos* that are a cross between them and the big imported steeds; or the degraded red man, in a ludicrous mixture of his own finery and cast-off European clothes, hangs about railway-stations, staring in wonder at the "fire-wagon" that has driven his people into the background. Could we turn aside among the low ridges that break the prospect, we might come upon raised platforms which in this region make tombs for mouldering warriors. This is the country of the Crees and of their inveterate enemies, the once-dreaded Blackfeet, of whom early trappers had such thrilling tales to tell; but now a single policeman, in his red coat and helmet, can ride up to an Indian camp and arrest the proudest chief as coolly as a London detective ventures into a thieves' lodging-house. In mere numbers the original stock are no longer formidable. The Indian and half-breed inhabitants of Saskatchewan can be counted in thousands among a population which by 1911 had rapidly grown to half a million. The whole number of red men in the Dominion is a little over 100,000, an estimate blurred by the fringe of half-breeds. Everywhere it was made a penal offence to supply an Indian with the alcohol that has been the most potent enemy of his race, and not only of his; so the Saskatchewan settlers now are content to let themselves go "dry".



Hauling Wheat to Market, Western Canada



Notman

Branding Calves, Alberta

ALBERTA

The plains of Saskatchewan are here and there broken by sand dunes that prepare the west-bound traveller's eye for the more broken features of Alberta, behind which the Rocky Mountains rise to view over a hundred miles away. This western province, in size and shape much the same as its neighbour, shows some varied characteristics. It has a higher general altitude; but, where the cold might be expected to increase, on the contrary the climate becomes tempered through the Chinook winds from the Pacific, by which, as Dr. Dawson puts it, "the warmth of the western ocean is as it were siphoned over the mountains upon the eastern plains". In passing over three mountain ranges, these winds have parted with most of their moisture, so that parts of

the country suffer from drought, and are not fit for agriculture without the help of irrigation, which is being carried out on an enormous scale along the C.P.R. line. On the other hand, such warm winds from time to time "licking up" the light dry snows that fall upon them, the farther plains, in old days a favourite winter resort of the buffalo, are available as grazing-grounds on which cattle and horses find pasture all the year round, while frost may strike them in summer nights. This climate is rather tryingly variable, the west wind often blowing a gale through the mountains, and occasionally sending up the thermometer 40° or so in a winter night.

A settlement of industrious Mormons from Utah, where arid soil had already been

made fertile, brought irrigation to bear here also; then Mennonites and other patient cultivators have been selling their Manitoba farms to make a new start on the dry lands of Alberta, whose south-western corner is being seamed with canals and ditches filled by dams on the abundant streams of the mountains. Thus the region from which cultivators were once warned off, by its thinner vegetation, can be broken up for mixed farming, that drives ranchers farther back into the hill country, where warm winds keep the springs from freezing. The "cattle-king" is no longer predominant in Alberta. He had hot quarrel with the sheep-breeders who came to dispute the territory with him; and in many cases he found rearing horses more profitable than cattle. One of the latest venturers here is the Prince of Wales, who on his 1919 tour through the Dominion acquired a ranch in Alberta. Ranching tends now to be done on a smaller scale than in the early days when sunburnt cowboys, once perhaps familiar with Pall Mall and Piccadilly, might be seen riding about in blue flannel shirts, fringed leather "shaps" or overalls, and broad-brimmed hats, sometimes with a touch of Mexican ostentation in the silver-mounted trappings of their horses; but this sort of display is going out of fashion on the western plains, giving place to what Mr. H. G. Wells calls the national costume of the Anglo-American, to wit "shirt-sleeves".

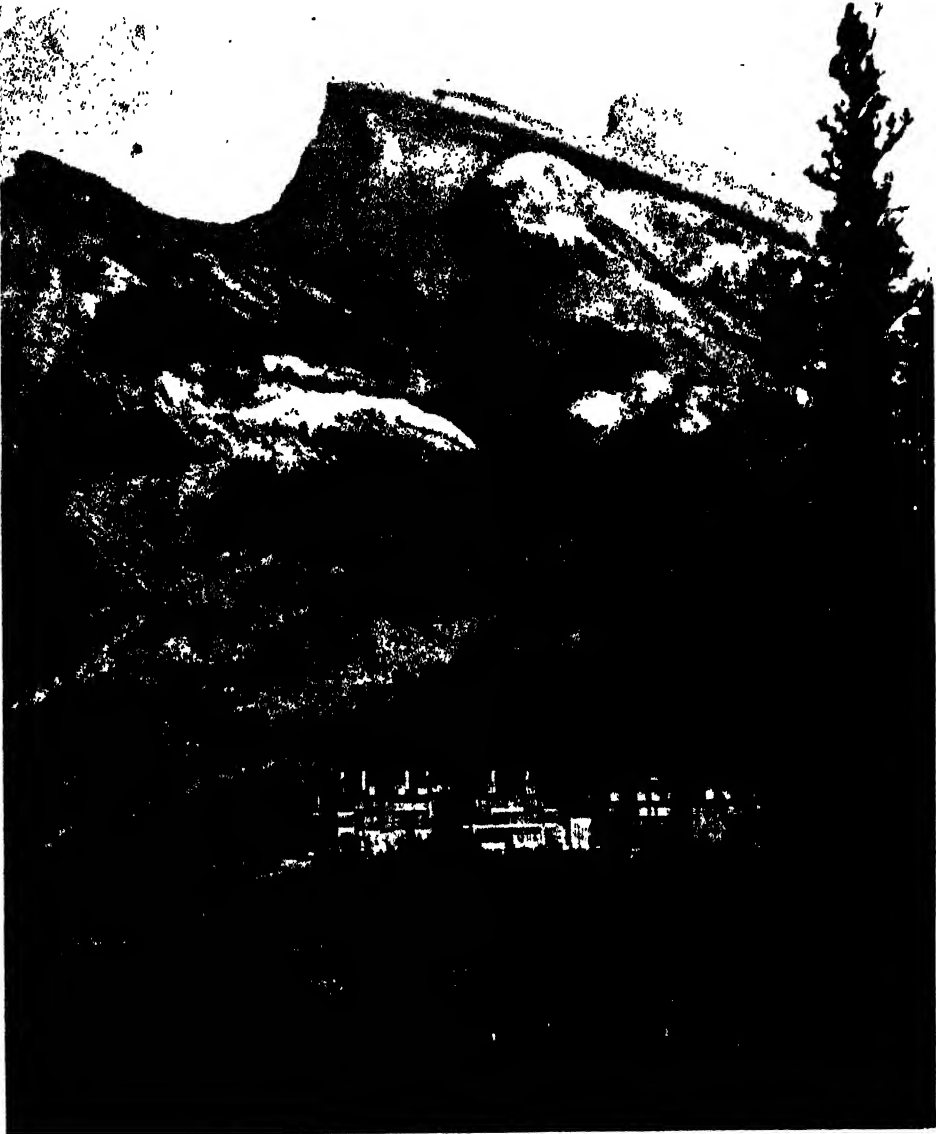
The south side of the province is rich in coal and lignite; and there has been much talk lately of its petroleum springs and reservoirs of natural gas. The chief coal-mines are in the Crow's Nest district, so called from an isolated dome of rock over the most southerly pass through the Canadian Rockies. Here already the annals of Alberta have to record mining disasters, too familiar in the "Old Country", such as an explosion that in 1914 buried 200 men in one of the Hill Crest mines of this vicinity, or an overwhelming snow-slide that in the mountains may add to the perils of this industry. Coal is also to be had on the north side, where in the Saskatchewan valley a recent traveller declares

that one has only "to back a wagon against the side of the ravine and shovel the fuel out of the earth". Such fuel is the more needed here, as timber is not the strong point of the prairie provinces, over their settled southern zone. On the better-wooded side, natural gas has been tapped as far north as Athabasca.

The population of Alberta, not as yet quite so large as that of its neighbours, seems to be more gathered into big towns. The capital is Edmonton, a well-laid-out city about the site of one of the old Hudson Bay forts, which, now including its neighbour municipality, Strathcona, on the other side of the North Saskatchewan, from a few hundred settlers at the beginning of the century, made up in 1911 a total of about thirty thousand inhabitants, doubled or trebled since. A score or so of thousands have been coming in yearly to a capital that already boasts fourteen banks and forty churches, besides the tram-lines and electric lighting that go without saying in an American city. This, the most northerly great city of the Dominion, is bound to grow as the railway centre of the new North-West, what Winnipeg became a generation ago for Manitoba. The Pacific lines of the Grand Trunk and Great Northern Railways pass through it, running on to cross the Rocky Mountains together, and each of them making or planning new branches to the north-west, where settlers are finding their way as far as the Athabasca and Peace Rivers, now it is shown that wheat can be grown at those high latitudes. North-west from Edmonton, 350 miles of rail lead to the rising town called Peace River, a centre for 600 miles of waterway.

A cross line southwards leads by Red Deer, a city of more than sixty thousand people, from Edmonton to Calgary, on the C.P.R. main line. This "Cow Town", so nicknamed when head-quarters of the ranchers, well-built of stone from the mountains close at hand, was at first the most growing centre of Alberta, and has now a population of over eighty thousand, among whom will not bulk so largely the ne'er-do-wells of English society that once were prominent here,

dumped on a new country to make a living if they could, or to loaf about hotel bars as Hat, in the south of the province, thriving on underground stores of natural gas that



Among the Rockies: the C. P. R. hotel at Banff

Banff is in the Bow River valley, the gap through which the railway passes on its way through Alberta into British Columbia. Banff is the station for the Canadian National Park, and in addition to its charms as a tourist centre, its hot sulphur springs offer a special attraction to sufferers from various ailments.

“remittance men”. At Calgary is the university with which Alberta has made haste to equip itself. A growing place is Medicine comes in most useful for lighting and heating in such a climate. Here goes off a branch of the C.P.R. that, by M’Leod and the Crow’s

Nest Pass, makes the most southerly way into British Columbia. In the south-west corner, Lethbridge, a centre of the irrigated lands, boasts the construction of one of the great railway bridges of the world, higher than the Forth Bridge, and longer than that over the Zambesi at Victoria Falls.

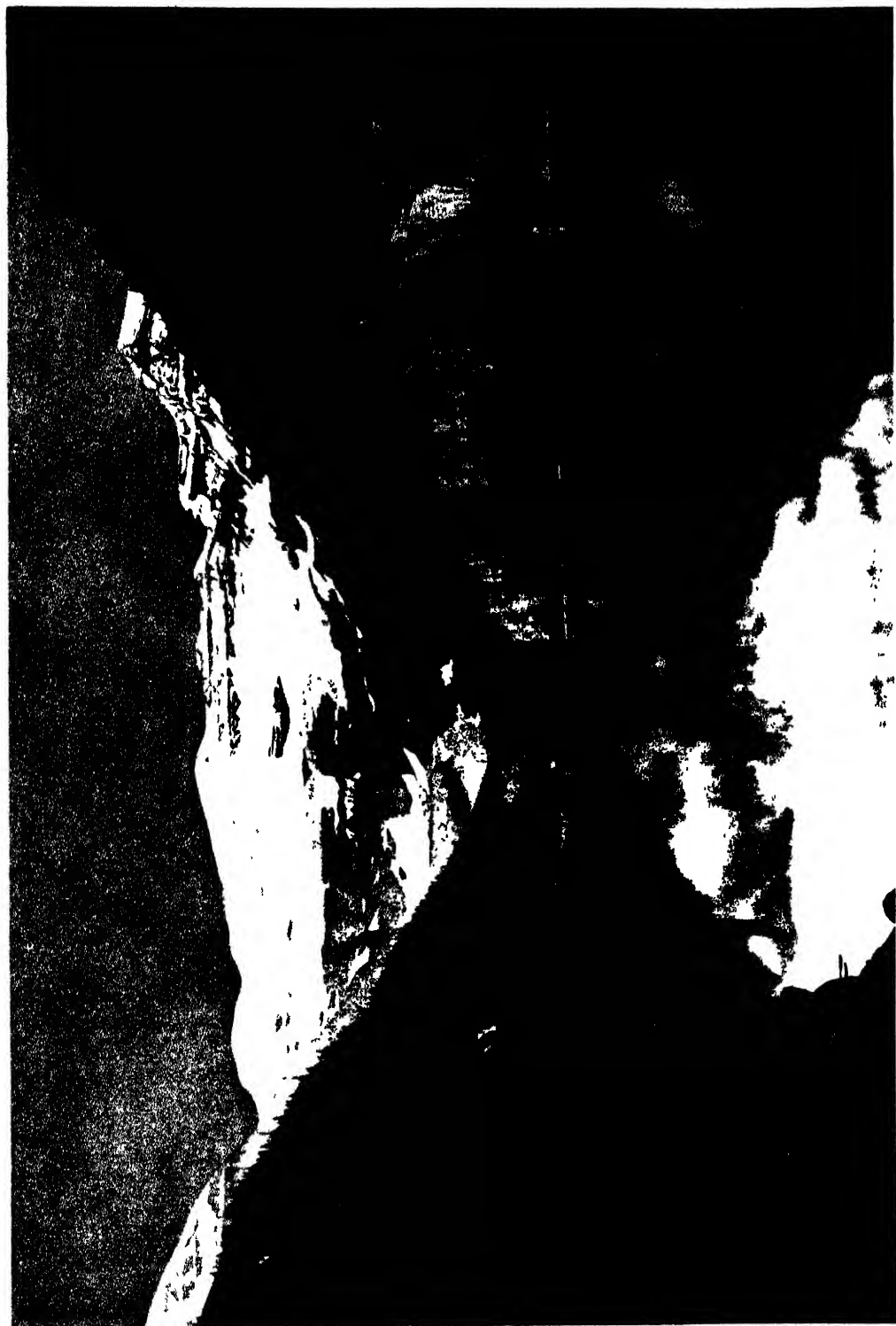
Calgary's "Mount Pleasant" commands a grand view of the Rockies that "guard the sunset". Hence the main line of the C.P.R., already 3000 feet above the sea, runs straight on through the mountains, whose serrated summits may now be hidden from view behind their swelling foot-hills, till, through the precipice-walled Bow River Gap, the train takes us among snowy tops, forest-clad slopes, and winding gorges, from which it scares away the bears, elk, big-horn sheep, and other game that still find refuge in the lonely recesses of the Rockies.¹ This is the show part of Alberta, where the Dominion has laid out its Rocky Mountain Park to vie with those of the Yellowstone and the Yosemite. The park is some nine leagues long, including scenery on the grand scale, mountains nearly 10,000 feet high, ice-beds, lakes, streams, cataracts, and forests, with signs of the quiescent volcanic forces that in time past have gone to shaping such a wonderland. Few travellers, with time to spare, do not stop at least a day or two at Banff, where the railway company has provided an hotel like a gigantic Swiss chalet, on a height commanding one of the finest prospects of the Alpine amphitheatre, opened up by roads, steam-launches, canoes, and bridle-paths. Banff is the Buxton of

Canada, too, having hot sulphur springs as invitation to invalids for a longer stay at its sanatorium, besides stalactite caves and other wonders of nature, along with various accommodations for strangers. Shooting is not allowed within the park bounds, but great trout may be taken in its waters, chief among these being a long curved lake named from the spirit of evil imagined as fearsomely haunting such impressive solitudes, till the nineteenth century learned to play with the sublime and to smile at devils. The buffalo herd, at first preserved here, has been transferred to a new park, enclosed by 70 miles of wire fence, beside the G.T.P. line on its way to Edmonton.

In the heart of such mountains a railway train might at every turn seem brought to a stand, but the invincible engine pants on up the passes, where white cascades and glacier-edges gleam far above, and green valleys or rocky watercourses open 1000 feet below. The air is so clear in good weather that every rock and tree stands out with a distinctness confusing our ideas of distance. We catch sight of striking points as yet nameless, unless to the Indians, which have still to be explored as well as christened. On the course of the railway, Scotland has stood a frequent godfather, with hint of the enterprise that spanned these mountains. Beyond Banff is reached Laggan, a station for three "lovely lakes in the clouds", as for the glacier whose discharges fill Lake Louise, to the charms of which that expert Alpineer, the Rev. W. S. Green, gives testimony in his *Among the Selkirk Glaciers*.

¹ "There was the backbone—jagged like that of the old saurian monsters—of this gigantic continent. We watched and watched them until the sun had sunk behind the fire-lit clouds, and then before it grew dark we could see that the snow came far down those awful hill-sides—indeed as far as we could trace their heights above the intervening country. In the train the view of the mountains comes quicker on the traveller, who will agree that the sight of the 150 miles of Alps from the Bow River Benches above Calgary is one of the most wonderful views in the world. From this point, although the nearest peaks are still forty miles away, they seem close, and look down from heights of 12,000 feet. From the square block of the Chief Mountain near the frontier, to the peaks to the north of Morleyville, the view is uninterrupted. The snow, early in the autumn, is low upon their flanks, and the tumbled series of icy cones,

broken rock battlements, sudden rifted gorges, and unscaled walls, extending right and left in an even front of white, produces an impression which can only be compared to that made by the Alps from the Lombard plains. But the colouring here is finer, for the snow glory changes to a deep purple at their base, and then in successive waves of deep blue, pink, grey, and yellow-green each shade is blended, until at your feet you see the steel-blue of the impetuous stream glancing in the golden setting of the rare and autumn-smitten woods of poplar. Where, as in the journey from Edmonton, men come upon the mountain chains more suddenly, owing to the dense forests, the surprise may be greater; but nowhere can they see such a contrast as at Calgary of mighty expanses of snow and of green sward."—Duke of Argyll's *Canadian Pictures*.



In the Heart of the Rockies, the lovely Lake Louise

The World of To-day

"I was quite unprepared for the full beauty of the scene. Nothing of the kind could possibly surpass it. I was somewhat reminded of the Oeschinen See in Switzerland, but Lake Louise is about twice as long; the forests surrounding it are far richer, and the grouping of the mountains is simply perfection. At the head of the lake, the great precipice of Mount Lefroy stood up in noble grandeur; a glacier sweeping round its feet came right down to the head of the lake. Half-way up the cliffs another glacier occupied a shelf, and from its margin, where the ice showed a thickness of about 300 feet, great avalanches were constantly falling to the glacier below. Above the upper glacier, the peak rose in horizontal strata, the edges of which were outlined with thin wreaths of snow, to a gently sloping blunt peak crowned with a cap of ice. The mountains closing in on either side and falling precipitously to the lake formed a suitable frame to this magnificent picture. The lake was of the deepest green-blue, like those in Switzerland, and the pine-forest, growing actually into the water, clad the mountain-sides in dense masses wherever trees could find enough earth for their roots. All this was reflected in the lake, which was barely ruffled by little puffs of wind, now striking in one place, now in another, and causing the water momentarily to sparkle in the sunshine."

The train reaches its highest point (5295 feet), underneath the conspicuous Mount Stephen (10,425 feet), christened after the first president of the C.P.R., then by Kicking-Horse Pass it descends into the

western province of the Dominion. An archway on the line marks the divide, whence streams flow east and west through "a sea of mountains", swelling above as yet unfamed scenes of beauty or grandeur like the Emerald Lake, the lofty Takakkaw Falls, and the Yoho Glacier, now accessible to tourists.

To the north here rise Mount Brown and Mount Hooker, which were looked on as the loftiest points of the Canadian Rocky Mountains, but their supremacy has been brought low; and Mount Robson (13,700 feet), a little farther to the north, holds up its head as the highest peak accurately measured. The Kicking-Horse, or Wapta river-course, comes about mid-way among some dozen other passes, their heights ranging from 7000 feet or so in the south to 2000 feet in the north, where the mountain chain falls away as it approaches the Arctic wilds. The two new transcontinental railways cross by the Yellow Head Pass below Mount Robson, where also has been laid out a park of wild scenery, in which Mount Geikie has been rechristened Mount Cavell, in memory of that martyred nurse. This pass is lower than that taken by the C.P.R. Beyond the mountains the lines go apart, the C.N.R. trending south to Vancouver, while the G.T.R. makes by the Fraser River for its more northern terminus at Prince Rupert, with a branch also to Vancouver



Alberta: watering horses on the Rosebud River, on a ranch near Calgary

BRITISH COLUMBIA

The Pacific Province of Canada has, like California, a marked character of its own, and if it has not yet prospered as much as California, it is hardly less a land of magnificent possibilities. Till the recent extension of the older provinces this was the largest member of the Dominion, while as yet more thinly peopled. Its 357,000 square miles would make a couple of great European kingdoms, but in 1901 it had not the population of a second-rate English city, under 200,000, figures more than doubled in 1911, and now fast increasing. A good many of these people were but transient guests, from the States and elsewhere, in search of sudden riches, not always gained; but, as the capabilities and advantages of this province come to be known, it is sure of permanent settlers, who will find it a home to be loved.

Of all the Canadian provinces, British Columbia is the most generally picturesque, being one labyrinthine mass of mountains, forests, lakes, river plains, and upland plateaus, over a breadth of 470 miles from the summit-line of the Rockies to the broken coast, along a length of 700 miles, the northern stretch of which is hardly yet explored. Its mountain chains, in general running north and south, are threefold. On one side rise the Rocky Mountains, on the other the Coast Range, beyond which other masses of land lie half submerged as an archipelago fringing the shore. Between is widely spread another system, popularly known as the Gold Mountains, but to be subdivided as the Purcell, Selkirk, and Gold Ranges, which in the central Selkirks have points about 10,000 feet. The Purcell Range, indeed, seems distinct only at the south end; then in the little-known north all these ranges draw together as the Cariboo Mountains, and bend round towards the ocean in the giant ridges of Alaska.

This rugged surface, besides many lake beds, encloses great streams wandering

deviously in their eager search for an outlet among the mountain barriers. The principal river belonging wholly to the province is the Fraser, over 700 miles long, which rises below Mount Robson and runs mainly southwards between the coast and the central ranges. Farther north the Naas and the Skeena find their way to the Pacific, and the Peace River breaks through the Rocky Mountains to the Arctic waters. The largest of all, the Columbia, rises in this country, but passes into the United States, after a course of "eccentric evolutions", in which, as Dr. Dawson says, it and its tributary, the Kootenay, seem to play "a sort of hide-and-seek round mountain ranges, until they find each other just before they cross the frontier together", the Kootenay having already taken a long trip into the United States on its own account. Their sources are close at hand, and at one point they flow, in different directions, only a mile or so apart, but have hundreds of miles to wander before they can make a marriage of it. These two are navigable by steamers in their lower British Columbian reaches, where they open out as the Arrow and the Kootenay Lakes; but for the most part the rivers of the province rush too rapidly to be of much use for navigation.

The deeply indented coast, fringed with broken masses of land, among which promontories and islands can scarcely be distinguished on the map, provides many excellent harbours. Its chief feature is Vancouver Island, at the south end, cut off from the mainland by a narrow sound, and from Cape Flattery, extreme point of the United States, by the Juan de Fuca Strait, mouth of the Puget Sound, that breaks deeply southward into Washington State. Northward lies the group of Queen Charlotte Islands, beyond which British Columbia is cut off from the sea by a southern extension of the Alaskan shore, with its breakwater archipelago. This coast

is washed by the warm Japan current, giving it a mild if somewhat wet and foggy climate, in winter like that of the most favoured edges of England, but with double its rainfall. Moisture-laden winds from the Pacific sweep over the ranges, nursing thick vegetation on their western faces, while the lee sides may be strangely dry, and in some too well sheltered parts the ground is barren without artificial irrigation. The climate, like the contour of the province, has thus a notable variety, while the high general altitude, as well as the latitude, keep it wholesomely bracing. There are many plains and alluvial strips available for culture and pasturage, but the main natural production is magnificent forests of often huge trees—lofty pines and spruce, tamaracks, a kind of red-barked larch growing two hundred feet high, the noble Douglas fir that may stand a hundred feet higher, the giant cedar that is the king of all, with the yellow cedar called cypress, and some trees known to us as shrubs, which here take larger proportions on a scale answering to the other features of nature. Like the eastern provinces, this side is often swept by forest fires, in dry weather scorching up large areas and spreading such a pall of smoke far over land and sea that ships are endangered by the obscuring of landmarks, when in cities the electric light may have to be turned on at noon.

We first reached this country by sea, when the Rocky Mountains were looked on as an impassable barrier. Following several bold voyagers in search of a passage to Hudson Bay, Captain Cook came here in 1778, and in 1795 his comrade, Vancouver, hoisted the British flag on Vancouver Island in defiance of claims by Spain. By this time Alexander Mackenzie had shown to other fur-traders the way across the Rocky Mountains; then Simon Fraser traced the river known by his name; and through these loyal Scots the region came to be baptized New Caledonia. For long, however, little was thought of our distant acquisition, best known as Nootka Sound from a convenient harbour on the west coast of Vancouver Island. It came into

evil notoriety through the massacre of the *Tonquin's* and the *Boston's* crews, the former disaster celebrated by Washington Irving's pen, the latter described by John Jewitt, a Lincolnshire lad, who was spared to live among the Nootka Indians, and eventually contrived to make his escape. The spread of fur-trade adventure brought a clashing between British and American interests, which in the middle of last century had nearly drawn the two countries into war; but the boundary was peaceably adjusted. The Hudson Bay Company ruled on the British side till Vancouver Island and the mainland were organized as separate colonies, which presently united, and in 1871 became part of the Canadian Dominion.

It was the discovery of gold, in the middle of the century, that had suddenly drawn attention to this distant possession. From Canada and California there set in a rush of miners, who almost from the first have been kept in rough order by our Government, the lawlessness and lynchings of American gold-fields being well restrained on this side the border. Gold is found all over the province, chiefly in the river beds, whose bottoms are dredged by machinery for the precious dust that may not have been washed on to their bars and benches; then these alluvial "placer" deposits of "flour gold" lead up to coarser particles, and on to their source in veins of quartz rocks. The chief diggings were at first in the northern Cariboo country; then enterprise was rather directed to the Kootenay valley in the south, and has since wandered to various points, led by what has sometimes turned out will o' the wisp promises. In the search for gold several metals have turned up: copper, zinc, lead, iron, quicksilver, and others in the form of mixed ores. It is prophesied that the province will prove more rich in silver than in gold. And more valuable, perhaps, than all those loadstones of adventure are the coal-fields of the mountains and of Vancouver Island. Petroleum and natural gas, also, have been discovered, with valuable non-metallic minerals, while still British Columbia has not had time to look about and estimate all its resources.



British Columbia: an extensive orchard in full blossom

Perhaps it is best known at home by its export of canned salmon. The seas abound in halibut, cod, herrings, and other fish, and the rivers in half a dozen kinds of salmon, hardly to be tempted with a fly, but caught in the way of business by tons a day, netted from the swarming water, to be cleaned, cut up, and canned while still fresh. Millions of pounds weight are packed in a year at the factories of the Fraser, the Skeena, and the Naas Rivers, on which most of the canneries lie. Large quantities are also sent away frozen in cold-storage chambers; and even the despised "dog-salmon" finds a market in China. But all that comes to our tables is a mere taste of the masses of food by which the streams seem blocked up in the spawning season, their edges often littered by dead fish, that give a dinner to hungry wild beasts. Huge sturgeon are taken, and sometimes such

thick catches of the fish called alewives that they will be used for manure on the fields, as by the early New England colonists. Another native of these waters is the "candle-fish", so rich in oil that when dry it serves the Indians for a torch.

What the buffalo was to the Plains hunters, the salmon is to the scattered Indian bands who, on the quieter reaches of the Fraser or the Columbia, may be seen fishing from their canoes, as also, when they are not washing for gold-dust, do Japanese and Chinese. Physically and morally inferior to the more or less noble savages of the backwoods and the prairies, these Pacific Indians have talents of their own, notably for carving, by which they recall the South Sea Islanders; and the suspension bridges which they threw across their rushing rivers show no small resourcefulness. Among them they have struck out

the Chinook jargon, which is the *lingua franca* of this coast. They gave some trouble to the early settlers, by whom they were often shamefully ill-used;¹ but now they are quiet enough, and many of them work in the mills, canneries, and mines of the white men, while most can indulge their native idleness in the reserves marked out for them. Some few even take kindly to industry on their own account, after the example of British settlers, who spread farms and cattle-stations over promising bits of the country, where orchards, vineyards, hop-fields, and poultry-breeding are being hopefully developed among woods still haunted by bears, in a corner of North America that claims to contain its greatest variety of furred, feathered, and finned game.

A very sore point here is the immigration of Asiatics, who make themselves useful in the menial work so few white hands have been found ready to take up, but are looked upon askance by Canadians as more sedulous workmen at lower wages. In spite of a head tax of 500 dollars on every Chinaman entering the country, over 30,000 Celestials had up to 1918 made their way into the Dominion, nearly all coming by British Columbian ports, and most of them sticking in this province, while some thousands have made their way as far as Ontario and Quebec, and into the States, where, in the cities, they are notable as laundrymen. In a recent year some £600,000 was produced by that tariff on yellow labour, neither taxation nor contempt availing to bar it out. The Japanese,

who numbered under 20,000, are in a different position, favoured by treaty between Japan and Britain, which makes them none the less unpopular. The Provincial Government has in vain sought to keep them out by enactments, overruled by the Federal Legislature in view of Britain's obligations to her ally, so as to cause some friction between these authorities.* A still more delicate question has lately arisen, here as in our African colonies, as to the admission of our Indian fellow-subjects. Since the beginning of the century, Punjabis and other industrious Hindoos have appeared in the labour market, to the riotous discontent of white wage-earners. It may be remembered what excitement arose at Vancouver in 1914 when a ship-load of those undesired recruits was refused admission, popular feeling being so strong that they could hardly have been landed with safety. By that year, however, some 2500 natives of India had gained a footing on this coast, and their number has since increased.

For all this slight infusion of alien blood, the settlers here are noted among their fellow-Canadians as markedly English, in accent, in sympathy, even in looks, since the milder climate does not parch their skins in summer nor in winter drive them to the stove-heat that so much shrivels the ruddy freshness of our race in America. They include a good many immigrants of a class with capital enough to undertake fruit- or dairy-farming; while a strong democratic spirit is more at home in mining camps or in the cities of the south-western coast corner, the best populated part of the province. Most of the interior towns are small as yet, none by the census of 1911 having quite 5000 inhabitants; but some have since been rapidly growing.

The best-known part of British Columbia is along the main line of the C.P.R., now a favourite tourist route as well as a highway to the Pacific, so necessary in the development of this isolated province that its impatient people threatened secession as penalty for delay in constructing that link with the rest of the Dominion. Field is the border station where clocks show

¹ The late Dr. Robert Brown, author of *Countries of the World*, had personal knowledge of this country, where he picked up many amusing stories of its early days. One of these seems hardly an exaggeration, when compared with sober narratives of fact. A white man having shot an Indian, some meddlesome official thought necessary to hold an inquest. The evidence duly heard, the jury brought in a verdict of "death from falling over a precipice". The conscientious coroner pointed out that there was no precipice in the neighbourhood; then the finding was amended to "death from the bite of a mad dog". The coroner again interfered, with the suggestion that a mad dog had never been heard of in the country; but the jury's patience was at an end, and they declined to find any better verdict "for an Indian".



Underwood & Underwood

Stately Mount Stephen, with Field, British Columbia, at its base
Field is ten miles below "The Great Divide", where the backbone of the continent is crossed.

Pacific time. A little way back from this a station was named Hector, after the discoverer who, disabled by a kick from his horse here, gave the title Kicking Horse Pass to what might be less unromantically called the Wapta Pass from the Indian name of its river. At first it took four strong engines to work the trains up a steep acclivity, where the gradient has since been eased by spiral cuttings and tunnels on precipice-edged slopes, giving passengers grand views over the cascading course of the Wapta or Kicking Horse, till they are plunged into its dark cañon, between whose bare walls the echoing roar of the torrent mingles with the rattle of the train to drown all voices, and nothing comes to view but "river and railway, smoke, spray and steam".

This pass debouches into the valley of the Columbia, its banks reached by the railway at Golden, a place swept and garnished from its original bad reputation as a miners' camp. Hence a branch goes south to the Kootenay country, connecting with another C.P.R. line that from Macleod in Alberta crosses the Rockies by Crow's Nest. The main line turns a little north with the Columbia, seeking a pass through the Selkirk range that rises on the farther side of its valley. It finds one at a height of 4300 feet under the Matterhorn-like peak of Sir Donald, where another stretch of magnificent scenery is reserved as a National Park, with the great Asulkan glacier as its lion, and the Glacier House as its modest Zermatt, at which, as at other hotels on the line, bold climbers may be found, sometimes attended by Swiss guides, brought so far to besiege snowy fortresses challenging the Alpine clubs of the Old World. Sportsmen, too, rendezvous here for a shot at bears or wild goats lurking among the recesses of those grand mountains, streaked by glaciers and avalanches, that to the artist offer an almost virgin field of picturesqueness. The train traveller is too much cheated of his prospects, as the rail has to be covered in by miles of massive snow sheds, in which he will be tantalizingly shut off from the finest points of view; on one stretch, indeed,

an extra line has been made in the open, to be used only during the fine season. The track has also to be protected by bastions against avalanches and falls of scree which have sometimes blocked it. A danger in its early days was forest fires, which a train might have to pass with caution, or to make a dash through scorching blasts and choking smother. Constant watchfulness must be needed on such a road, no longer running straight and simple across the flat prairies. By amazing loops curling down the mountain-sides, on lofty trestle bridges spanning flooded torrents, through stupendous gorges and under snowy peaks, it threads the Selkirk mazes, beyond them to emerge again upon the Columbia, this time flowing south after a bend of hundreds of miles.

The river is crossed at Revelstoke, from which once went a highway by the long Arrow Lakes to the Kootenay country so eagerly sought by gold-diggers. At one time the largest place here was Rossland, near the entrance of the Columbia into the United States, but its 6000 people had fallen away by half in the first decade of the century, showing how the gold did not "pan out" as was hoped. Many who were lured by gold, however, diffused themselves hereabouts in more patient occupations; and this most picturesque region, watered by the Kootenay and Elk Rivers, gains new fame for fruit-growing, around the towns of Cranbrook and Nelson, which latter, with as yet under 5000 inhabitants, seems at present the largest place. Along the line from Crow's Nest, coal-mines have been opened that may prove richer than the gold diggings.

Leaving the Columbia, the C.P.R. main-line is confronted by the Gold Range, which it enters by Eagle Pass, under Mt. Begbie, so named after the Chief Justice to whose firmness British Columbia largely owes the taming of its first rough citizens. This pass is a comparatively easy one, the highest point being under 2000 feet; but it takes us by grand cliff, forest, and lake scenery, the rail winding round or over arms of the straggling Lake Shuswap, and

throwing off a branch southward to Vernon and the long Okanagan Lake, reached through a fertile valley that is being taken up for fruit-farming. At the meeting of the North and South Thompson Rivers it passes Kamloops, which, standing 1500 feet above the sea, has some repute as a health resort, as well as being centre of a

light by Yale, where the river calms down to become navigable, and is soon swollen by the waters of Lake Harrison on the north. There comes a dry belt of less striking aspects and less hopeful prospects till it can be cleared of a plague of mosquitoes. Railway and river for some way hold south, till by Hope they find a gap to turn west-



Bonnington Falls, on the Lower Kootenay River, British Columbia

In this magnificent cataract lack of height is more than compensated by the vast volume of water which foams over its broad brink. The falls provide the power that is utilized in the Rossland Mines

plateau region well adapted for settlement.

The railway follows the Thompson River, expanding into Lake Kamloops, and at Lytton reaches the Fraser. By this great river the line runs, buried for hours in its deep cañon, now carried high above the rushing glacial waters, now crossing them on a viaduct, now plunging from the half-gloom of nature's stupendous cutting into a tunnel, at length emerging into full day-

ward through the Coast Range. Thus, past Mission Junction, where connection is made with a railway from the States, we come to the Pacific at Port Moody, for a time terminus of the line now carried on to Vancouver. A short branch goes off to New Westminster, which, near the mouth of the Fraser and the United States frontier, was at first the provincial capital on the mainland, and is still a place of some 13,000 people, who boast for it the largest

saw-mill in the world; but it has been far outgrown by Vancouver.

Vancouver, the largest city of British Columbia, stands on a promontory in Burrard Inlet, giving it the natural harbour from which great liners start to Japan, China, and the South Seas, a range of commerce now widened by the Panama Canal. It had the luck to be burned down in its mean early days, and has been rebuilt in a handsome, solid style, worthy of its aspirations to vie with San Francisco. With lumber as its chief trade, it has fast grown on to a population of over 200,000, and spreads into thriving outskirts like the new residential annexe of Point Grey, which gives homes to nearly 20,000 under an independent municipality. In the Point Grey Peninsula is British Columbia's new university, its construction delayed by the war. The environs have beautiful features, adapted in the Stanley Park, where drives and walks open vistas upon landlocked waters running up to Puget Sound, the mountains of Vancouver Island opposite, and the range in which to the south Mounts Baker, Rainier, Hood, and Shasta raise their snow-clad heads above the Pacific. Few cities can boast such superb prospects. Among its magnificent natural timber the thousand-acre park has a zoological collection, in which the mighty bison may be seen pining as a captive curiosity. Like other Canadian cities, Vancouver is well supplied with electricity, tramways, and local rails, one of which runs up to a grand cañon beyond the harbour inlet. An electric line connects it with New Westminster, a steam-boat service with Victoria.

It seems a pity that Vancouver, originally called Granville, had not fixed on a name to avoid confusion with the opposite Vancouver Island. This oldest part of the province enjoys a delightful climate, but for a considerable rainfall that may make it wet and muggy in winter. At the south end, Victoria, though not so large as Vancouver city, is capital of British Columbia. This is a handsome and beautifully-situated place, dignified by the Government Buildings, its life diversified by Chinese, Japanese, and

Indians, as by mariners of various rigs, for this is the harbour of the Canadian fur-sealing fleet, and of other more distant trade. Along the shore of the strait opens the naval harbour of Esquimalt, this, like Halifax, having till lately been an imperial station on the line of posts by which the British drum-beat is heard round the world; but its garrisoning is now transferred to the Dominion. A hill near Victoria has been chosen as site for the Dominion Observatory, equipped with what is declared the largest of telescopes. From this "city of sunshine", with the *alias* of "the Evergreen City", that can advertise "Golf every day in the year", a railway runs to the important Nanaimo collieries on the inner coast, which support a town of nearly ten thousand people. Another line, by Ladysmith, a name that is a hint of its date, leads to the Barkley Sound on the deeply indented west coast. About these lines is the best-settled part of the island, in all nearly 300 miles long, but most of it still wild hills and evergreen forests. In the south-eastern corner has gathered a very British colony, largely consisting of retired officers and men of some means, for whom Vancouver Island seems a brighter England. Besides huge Douglas pines and cedars, there are here English oaks, and turf rich as England's, with English flowers and weeds, and English fruits thriving where fig trees grow wild, the grass already dappled by dandelions and buttercups beneath clumps of gorse, and fern, and bracken, and blackberries filling up the woods that have been stocked with English pheasants. Such suggestions of "home", found more or less over the whole province, are thickest about Victoria, that prides itself on being more English in feeling than any other corner of Canada.¹ A very sore point with its

¹ "But standing here by the shore, or indeed anywhere on this side of Victoria, and looking out to sea, all thoughts of Devonshire or Sussex fly in a moment, for across what looks like a narrow strait, but is in reality nearly 30 miles in breadth, a long line of glittering snowy peaks cut the sky. Of all the panoramas I have ever seen in North America, only the distant view of the Rockies from the prairie will compare with the spectacle of these Olympian mountains rising



A General View of Victoria, British Columbia's capital, with the Canadian Pacific Railway wharves in the foreground

voluntarily exiled Britons, and with other citizens of British Columbia, is the recent "dry" legislation, which here, as elsewhere in the Dominion, has been angrily and openly defied.

The Canadian Northern railroad, after crossing the Rockies west of Edmonton, turns south by the valley of the Thompson River to keep company with the C.P.R. for Vancouver. The Grand Trunk Pacific has struck out a more northerly line, beside Mount Robson, by the Fraser River valley,

then down the dark defiles of the Skeena, for a terminus of its own at Prince Rupert, 550 miles north of Vancouver, and about 50 miles south of the Alaskan boundary. Hazelton is its northernmost point, whence a perilous old trail to Klondike ran up the Skeena. It passes by other stations as yet little more than significant names, Fort George, Fort Fraser, through a country whose chief wealth seems its forests of grand timber, hiding a wilderness of lakes and rivers. North of the line is reported a

sheer out of the sea. Though the atmosphere is soft and often grey like that of Britain, its infinitely greater clearness is fully demonstrated here in a most emphatic manner. The Strait of Juan de Fuca dividing Vancouver from the American mainland and opening to the ocean, is just here something wider than the Straits of Dover. But these snowy heights, so far up in the sky with the dark masses of mountain-side lowering gloomily between them and the sparkling sea below, give the latter the appearance of a mere estuary. This,

however, as a matter of scale and distance, seems almost as nothing when you turn and look over your left shoulder. For yonder, just 80 miles away in an air line, Mount Baker springs up as ghostly and aggressive to all appearances, as when we saw it at half the distance from the junction of the Fraser and the Stave. Indeed I should like to know how far one has to travel on the way to China before this extraordinary peak sinks into the ocean."—A. G. Bradley's *Canada in the Twentieth Century*.

The World of To-day

discovery of anthracite coal beds, extending over hundreds of square miles, which should be a valuable asset for a province harbouring so many great steamships. Salmon and halibut fishing has been the flourishing industry of a broken coast, on which, behind a strait shut in by the Queen Charlotte Islands, was found a safe roomy harbour and picturesque site for the town christened Prince Rupert. Hence steamers were soon running to Port Simpson, farther north, and up the narrow Portland Canal to Stewart, that had a boom of new gold-

fields, on the Alaskan boundary. Prince Rupert hopes to rival Vancouver by a line of Pacific steamers that would make a nearly 500 miles shorter voyage to Japan. Before its railway was finished, in 1911, this harbour, already taking the title of "city", had gathered some five thousand people, who since then have been multiplying fast. Half a century to come, if these pages should hold together so long, the reader may smile to note what slight account is here given of British Columbian cities now in their lusty childhood.



Grove of Big Trees near Victoria, B C.

THE NORTH-WEST TERRITORY AND YUKON

As yet little has been said of the greater part of Canada, its vast wilds lying round Hudson Bay and reaching within the Arctic Circle a region marked off in zones answering to the *taiga* and *tundra* of Siberia. Above the fertile belt now being ploughed up by railways comes a region of forests, which gradually dwindle down into the Barren Grounds of icy rocks where nothing thrives but moss, replacing a profusion of berries and even of flowers, brightly coloured by the long sunlight that has still strength enough to thaw the frozen soil. No hard-and-fast line, indeed, can be drawn for these belts. Local conditions help the characteristics of the one to straggle into the other. There are favoured spots on which crops and hardy vegetables can be grown up to a few degrees below the Arctic Circle, notably on the west side, where the Chinook winds penetrate through the coast ranges; but for the most part nature is the only farmer that can do anything here with a short chilly summer following the long night of Arctic winter, often glorified by the *aurora borealis*, lunar rainbows, and other coruscations of far northern skies.¹

The difficulty of communications alone has been enough to freeze up the Far North

from settlement; and the railways now making or projected to the shore of Hudson Bay will only touch an edge of that wilderness. A thousand miles into its heart runs this land- and ice-locked sea, with the deep southern recess James Bay, open to ships only in the short summer. Hither flow a maze of lake and river waters, which, unlocked in summer, then give roads, interrupted by rapids, for the canoes and stouter "York boats" of the trade that found its outlet at York, capital of the Hudson's Bay Company, or by way of the Great Lakes to Montreal, or by trains of Red River carts into the United States. In winter these ways are sealed up, then, for want of forage, the transport of the Far North is confined to sledges drawn by fierce, hungry dogs, not to be kept from eating their own harness when their drivers cannot feed them with frozen meat and fish. The men may be hard put to it to feed themselves, if no game appear as a godsend, reduced to chewing their moccasins for a relish to bark and scanty moss scraped up from beneath the snow. The sufferings of Franklin's famous expeditions here have been often experienced by obscure adventurers whose end was never traced out.

¹ "Long before the treeless wastes are reached the forests cease to be forests except by courtesy. The trees—black and white spruce, the Canadian larch, and the grey pine, willow, alder, &c. have an appearance of youth; so that the traveller could hardly suppose them to be more than a few years old at first sight. Really this juvenile appearance is a species of second childhood; for on the shores of the Great Bear Lake four centuries are necessary for the growth of a trunk not as thick as a man's wrist. The explanation of this fact is that the summer is so short that, though fresh shoots are brought forth each season, there is no time for the formation of new wood. The farther north the more lamentably decrepit becomes the appearance of these woodlands, until presently their sordidness is veiled by thick growths of grey lichens—the 'caribou moss' as it is called—which clothe the trunks and hang down from the shrivelled boughs. And still farther north the trees become mere stunted stems, set with blighted buds that have never been able to develop themselves into branches; until, finally, the last vestiges of arboreal growth take refuge under a thick carpet of lichens and mosses,

the characteristic vegetation of the Barren Grounds. Nothing more dismal than the winter aspect of these wastes can be imagined. The Northern forests are silent enough in winter-time, but the silence of the Barren Grounds is far more profound. Even in the depths of mid-winter the North-Western Bush has voices and is full of animal life. The barking cry of the crows (these birds are the greatest imaginable nuisance to the trapper, whose baits they steal even before his back is turned) is still heard, the snow-birds and other small winged creatures are never quiet between sunset and sunrise; the jack-rabbit, whose black bead-like eye betrays his presence among the snow-drifts in spite of his snow-white fur, is common enough; and the child-like wailing of the coyotes is heard every night. But with the exception of the shriek of the snow-owl or the yelping of a fox emerged from his lair, there is no sound of life during seven or eight or nine months of winter on the Barren Grounds unless the traveller is able to hear the rushing sound—some can hear it, others cannot—of the shifting Northern lights." E. B. Osborne's *Greater Canada*.

This wilderness has mineral wealth, if it could be got at—gold, copper, coal, petroleum, and natural gas. Its forests shelter great game—the wood buffaloes, few survivors of their race; the moose, or elk, that is the proudest prize of Canadian hunters; the cariboo, a kind of reindeer that in summer finds pasture on the mosses of the Barren Grounds, where it seems to be driving on to the ice that curious creature the musk-ox, half-ox, half-sheep. The frozen shores are a summer picnic-ground for enormous flocks of wild fowl, moving southward at the approach of winter. The waters contain some curious fish, with amphibious creatures like the beaver, whose skin was long the standard of value in Indian trade; the otter, so much prized for his spoils: the musk-rat, speared through the ice, that in its small way imitates the rich coat of the fur seal. Then there are the tribes of bears, foxes, weasels, and the lynx. In summer arises a plague of mosquitoes and stinging flies more tormenting than in the tropics. The ice-packed seas nurse whales, walruscs, and seals, which have been too recklessly destroyed where they can be reached, whereas the Canadian Government takes measures to protect the land animals from wanton slaughter. On certain islands, now, fine-furred foxes are preserved as carefully as in another island we know of, where only their brush has any value. The useful Lapland reindeer has been introduced in this congenial climate, where the experiment is being made of crossing it with its cariboo kindred. A cross of domestic kine with Alberta's preserved bisons produces another hybrid, the "cattalo", promising a new stock valuable for meat as well as hides.

The native inhabitants are Indians, mainly of the widespread Chippewyan tribes, in the Far North fringed by stunted Eskimo, who seem to come from a different stock. These red men have been easily tamed, for it is all they can do to keep themselves alive through the long hard winter, when even their bloodthirsty feuds are half-frozen; and they have fallen to depend on the traders, to whose storehouses they

bring their furs, to be in return provided with guns, powder, blankets, gaudy handkerchiefs, and luxuries like tea and tobacco, often with food; but strong drink has been kept to themselves by their Hudson's Bay Company masters, still holding a practical monopoly of such influence. These white exiles have mingled their blood in a hardy race of "breeds", Scotch and French, who link the two races, but do not illustrate the best qualities of either. Round the "forts" and "factories" established by the fur-trading companies, usually upon the great waterways, may have grown up a few Indian huts, forming what is most like a town within the hundreds of miles that separate it from the nearest neighbour. Mission stations, Catholic and Protestant, have also been founded here and there, at which, with hearts kept warm by love of their soul-starved brethren, devoted men and women brave the hardships, the dreariness, the isolation of the Arctic Circle.

The population of this whole region, half the size of Europe, would not make up a thriving city in more favoured climes. Beyond it, to the north of Hudson Bay, lies the unmeasured area of the Arctic Archipelago, where there are no facilities for collecting census-papers, and only the hardest of human beings can find a home upon frozen islands blocked up or buried beneath masses of pack-ice. The emerging bits of land are vaguely traced and baptized by such names as Baffin Land, North Devon, Melville Island, Prince Albert Land, the Boothia Peninsula, and so forth, the stretch on the north being also known as the Parry Islands; but this part of Canada's dominions can scarcely be reckoned in the real estate of the world. The most northerly point known, at the end of a large island separated from Greenland by a narrow strait, is Grantland, on the edge of which a mountain range was christened after the *Challenger* by a sledging-party from the Nares Expedition.

The lands on either side of Hudson Bay were till lately marked off as huge districts, named Ungava, Keewatin, Franklin, and Mackenzie, each vaguely credited with a few



Deer Hunters with their first Deer

Underwood & Underwood

thousand inhabitants. But since 1912, as previously explained, the provinces of Quebec, Ontario, and Manitoba have extended their bounds over those northern wilds to the Arctic Sea. Saskatchewan and Alberta, also, have taken in a region of interlocking streams and huge sheets of water, largest among them the Athabasca Lake, into which flow the Peace and Athabasca Rivers; then British Columbia has, like them, drawn a neat northern boundary-line at the sixtieth parallel of latitude. Beyond lies what is known as the North-West Territory, another labyrinth of still larger lakes draining into the Arctic, the Great Slave Lake, the Great Bear Lake, and many more, known only to fur-traders, and to bold explorers like Franklin, who found an unmarked grave on the ocean edge of that jumble of land, water, and ice christened by his famous name. Its sheets are mostly

reservoirs of the Mackenzie River, discovered by Alexander Mackenzie, 1789, which, on the west side of the district also called after him, opens by a wide delta into the Arctic Sea, and is navigable for over a thousand miles upwards. At its mouth, to keep American whalers from demoralizing the natives, there has been established a station of Canadian Police, which may vie with the Danish Inspectorate on Disco Island, off Greenland, for the honour of being the most northerly outpost of a civilized Power, unless Russia had a dungeon or so on Nova Zembla. On the east side, the Great Fish River, the Telzoa River, and others flow into Keewatin; and in the centre there runs into the Arctic the Copper-mine River, hit upon, 1770, by that lively writer Samuel Hearne, the first white man to explore these barren grounds. The population of the north-west corner is estimated



A Settler in the Yukon with his Six-foot Snowshoe

at about twenty thousand, apart from that of Yukon, which, in 1901, contained 27,000 people, almost as much as all the other Arctic lands put together

The northern end of the Rocky Mountains separates the basin of the Mackenzie from another great river, the Yukon, whose upper waters belong to Canada before it flows into Alaska, after being formed by the junction of several streams, chief of them the Lewis and the Pelly. Discoveries of gold here have given this region such value that it recently became organized as a separate territory under the name of YUKON, with a special status as sending a representative to Parliament. The richest deposits were found in creeks, which soon received such names as Bonanza and El Dorado, flowing into the Klondike, a tributary of the Yukon on its right bank as it approaches the frontier of Alaska, drawn along 141° W. longitude. At the mouth of the Klondike,

quickly sprang up Dawson City, as capital of this auriferous district. A little below was the abandoned fur-trading station Fort Reliance, by their distance from which up and down the river other points have been named Sixty Mile and Forty Mile. Before entering American territory the river passes Fort Cudahy, *alias* Buxton, seat of an Anglican mission, and of a Canadian police post, a few degrees below the Arctic Circle. Other names, not yet on maps, may wax or wane. Dawson itself soon got the length of having newspapers, hotels, and cafés, as also two suburbs across the river, "Klondike City" and "West Dawson"; but the life of all these depends on how the gold "pans out" through which they grew like mushrooms, when the early prospectors were securing hundreds of pounds' worth in a day, and patches of else worthless land came to be sold for tens of thousands.

The Klondike "boom" began in 1897. Gold had been sought for here without striking success, till a steamer brought to San Francisco a number of lucky prospectors with a "ton of gold" among them. At once a rush set in from the Alaskan diggings, and from the States as well as from Canada. Many of the first comers, some of them "Chee Chacoos"—the "tenderfoot" or "greenhorn" of older slang—quite inexperienced in mining, were extraordinarily fortunate in windfalls of coarse gold and nuggets washed out of the frozen gravel. They seemed to deserve success by the trying difficulties of reaching their Tom Tiddler's Ground. As was shown in the account of Alaska, they had the choice of a long roundabout sea voyage, or of a land journey with its first stage over an Alpine pass, across which everything had to be carried or drawn by dog sledges. Horses cannot stand the winter here, and reindeer have only of late been introduced as an experiment. Even when the adventurers arrived safely with their belongings, they had much ado to make sure of shelter and of warm clothes. Wages, if any man could be got to work for another, were two or three pounds a day, the cost of everything being in proportion. Half a dollar was the

smallest coin in use, the price of a needle as of a drink of whisky. Water, through most of the year, must be had by thawing frozen ice and drinking before it hardens again. In winter a man did well to get rid of his beard, lest it should freeze to his bed-clothes; and a group of talkers might seem wrapped in mist from the congealed moisture of their breath. It was not every poor fellow who could make a "grub-stake", that is, enough to live on, always in the hope of a "home-stake", which would enable him to return rich, to "go outside", as was the expression suggested by the imprisoning isolation of this eagerly-sought valley.

Through the long dark winter the diggers toiled at loosening the surface of ice-mud felted with moss; then, after the top layer had been worked away, they could thaw the ground by great fires, for which the material was abundant. The dirt thus collected would be washed out in summer, with the chance of any painful showing a

sediment worth a hundred dollars. Severe as it was, winter is said to have been the more healthy season. In summer, rather, men suffered from damp, from scurvy and indigestion, brought on by want of fresh provisions; and then, too, they were tormented by swarms of big mosquitoes, which picturesque American exaggeration represents as so thick that one must cut a way through them with an axe. But all hardships were borne in the hope of sudden riches, and the continual excitement of rumoured new discoveries that kept the colony in a state of most unstable equilibrium.

Some women shared the early sufferings of their husbands, where a hardy and handy wife was worth her weight in gold. Before long, as the camps rapidly grew to towns, doubtful characters of both sexes came to ply their trades; saloons, gambling-dens, and dancing-halls flourished as well as stores, before churches and schools were built. With all their shortcomings, the



Modern Methods in Klondike: hydraulic mining in operation

rough miners soon developed a sense of honesty, and a man's bag of gold was safe without locks. The Canadian Mounted Police early appeared upon the scene, through whom order was well kept, the carrying of pistols being forbidden. The miners, indeed, complain of Canadian land regulations and royalties on their winnings; but decent men, who could compare these with the Californian diggings in their lawless period, might for once be thankful to live under a less democratic Government. A large proportion of the diggers were from the States; and American companies made huge profits by their enterprise in supplying this dear market.

Transatlantic energy and resource have in a few years gone far towards mitigating those early hardships, while the gold-finding is now more a matter of industry and calculation than of dazzling strokes of luck. So rich were the early yields of Klondike that many expected here to come upon the 'mother lode', that reservoir of precious metal which is the dream of every Pacific miner. Some, it is told, made haste home to spend their gains before gold lost its value. But such glowing hopes have been somewhat damped by further experience. The first finds, as usual, were in "placers", those "poor man's mines" where the gold has only to be washed or sluiced out from the dirt and gravel among which it may have settled. But even these deposits cannot be thoroughly worked without hydraulic apparatus, requiring capital and labour; and

it remains to be seen whether the rocks are rich enough to pay for crushing out their veins and spangles by such machinery as here could be erected only at enormous expense.

Any day, of course, might come new discoveries; but it seems as if the cream of the Klondike streams had been skimmed off; so the reader would do well to make inquiries before setting off to Yukon in search of fortune; and railway-makers may be in no hurry about a proposed line from Edmonton. It needs a railway, since a misfortune hit this corner of Canada in the decision of the Alaska Boundary Commission, cutting it off from the sea, unless a new way can be found from some part of the British Columbian coast. Dawson was expected to have 20,000 people by 1901, when the census found not quite half that number. In 1911 the population of Yukon had shrunk to under 9000, and that of Dawson to about 3000. In 1904 the output of gold had gone down by half, and steadily decreased for some years till, in 1912, there was a slight improvement. Though the country has coal as well as gold, it does not seem very inviting, a point on which, however, opinions differ. Most sojourners, eager to get away, describe it as dreary and dismal. It has to keep Christmas with only two hours' daylight.¹ But some writers prophesy that this may one day make a summer health resort, if its wild Alpine scenery could be opened by a railway to take travellers out of the Yukon valley as well as into it.

¹ Archdeacon Hudson Stuck's *Ten Thousand Miles with a Dog Sled*, describes the continuous spectacle of sunrise and sunset almost running into each other in those far northern winter skies. "Especially in very cold weather, which is nearly always very clear weather, that brief appearance is preceded by a feast of rich, delicate colour. First a greenish glow on the southern horizon, brightening into lemon and then into clear primrose, invades the deep purple of the starry heavens. Then a beautiful circle of blush pink above a circle of pure amethyst gradually stretches all around the edge of the sky, slowly brightening while the stars fade out and the heavens change to blue.

The dead-white mirror of the snow takes every tint that the skies display with a faint but exquisite radiance. Then the sun's disk appears with a flood of yellow light but with no appreciable warmth, and for a little space his level rays shoot out and gild the tree-tops and the distant hills. The snow springs to life. Dead-white no longer, its dry, crystalline particles glitter in myriads of diamond facets with every colour of the prism. Then the sun is gone, and the lovely circle of rose pink over amethyst again stretches round the horizon, slowly fading till once more the pale primrose glows in the south against the purple sky with its silver stars."



The St. John's Fishing Fleet lying in the Harbour

NEWFOUNDLAND

This colony, still clinging to its insulation, has not yet thrown in its lot with the Dominion Commonwealth; but on our side of the Atlantic it is always thought of as part of Canada, and their political union is probably only a matter of time. Newfoundland has some dignity to stand on as the oldest British colony, so far as title goes; but England did not take effectual possession of it till after the settlement of Virginia and New England, and even then long played but a stepmotherly part to the island. The French were first on its fishing-grounds, and but lately resigned some vaguely-defined treaty rights on its western shore, while they still hold two small islands to the south, Miquelon and St. Pierre, the last fragments of France's transatlantic empire. Newfoundland is a British dependency, having representative institutions which enable the people now and then to express dissatisfaction with what they consider indifference to their interests; and a *modus vivendi* settled with American fishing in-

terests does not please them so well as the oiling of rusty friction with France

The rocky and irregularly-shaped island, 1900 miles distant from Ireland, is somewhat larger than that country, with a population less than Dublin's, not quite a quarter of a million. Its people make up in quality what they lack in quantity, being a robust stock seasoned to an ocean-tempered climate, whose extremes run mainly to damp and fog, in which respect Newfoundland bears to the American continent much the same relation, intensified, as the British Isles to Europe. Consumption, indeed, seems to be fatally prevalent among them, owing no doubt to want of fresh air in houses closely shut up through the long winters, whose gloom is half-answerable for too many cases of insanity. The capital is St. John's, on a bay of the south-east Avalon peninsula pointed by Cape Race. More than once ruined by fire, St. John's has been rebuilt on the bay slopes, adorned with two cathedrals that

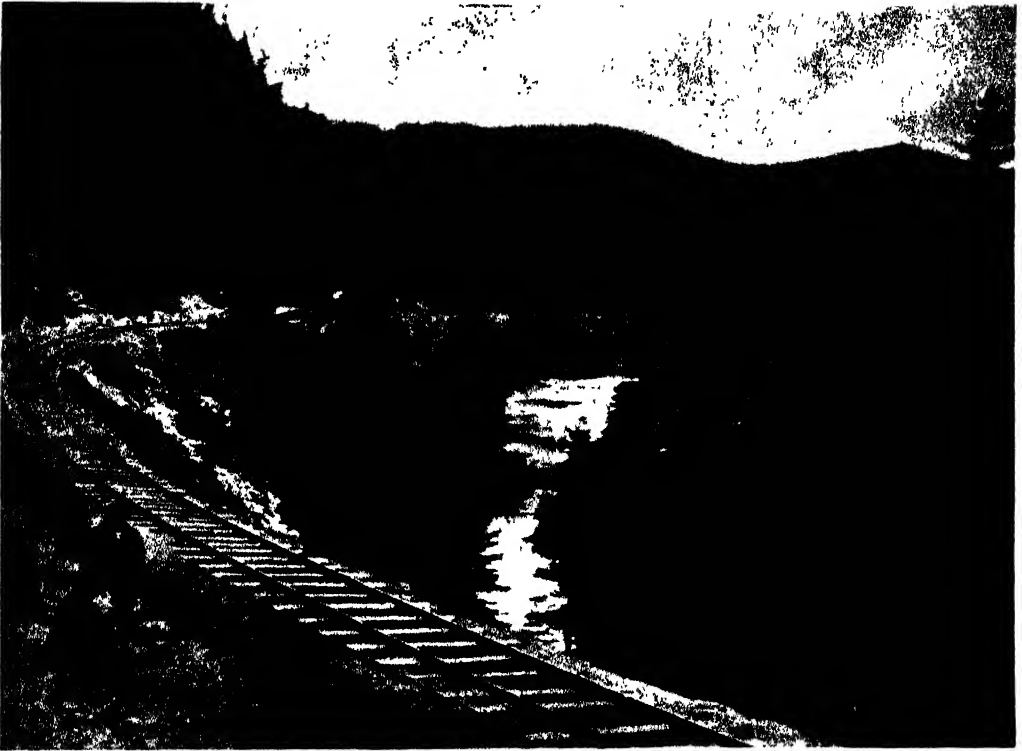
represent the division of its 30,000 inhabitants into Catholics and Protestants. Hence a light railway runs across the peninsula to Harbour Grace, the second town, on a point separating Conception Bay from Trinity Bay, the latter the landing-place of the first Atlantic cable. The line has been continued, with branches, across the island, and has its terminus at Port aux Basques, near Cape Ray, the south-western point.

The south-eastern corner, about the capital, is the least thinly settled. Much of the interior is hardly known, except in a general way as forests abounding in game, "green plains marbled by woods and lakes", or barren stretches of peat; and the long winter makes the soil more fit for pasturage than agriculture, though heavy crops in some parts are favoured by a fine autumn season. Newfoundland has several minerals, copper and iron-ore being worked as yet with most success. The approach to St. John's up Conception Bay is half blocked by Bell Island, a huge pile of iron ore, so easily won that it used to serve as ballast for ships before its value was recognized. Of late years an important industry has arisen in turning the forests into wood-pulp, and that into the cheap paper so much in demand for newspapers. One company, not the only one so concerned, has acquired rights over nearly four thousand square miles in the interior, from which by help of abundant water-power, its mills can produce 200 tons of paper a day. On the Exploits River, which is in part a long lake, grows up a thriving town, at Grand Falls, the chief station, whence the company has a private railway to the port of Botwood. This new enterprise is welcome as giving employment in winter to frozen-out fishermen. The leading occupation of Newfoundland has long been the catching, curing, and packing of cod, herring, halibut, salmon, lobsters, and so forth, that abound about the coast, with the making of cod-liver oil, and such by-products as glue from fish skins. The fisheries, originally fostered by the Lenten demand from Catholic countries, still their best customers, have

caused the amphibious Newfoundlanders to neglect other resources, a proverb with them being that one acre of sea is worth a thousand of land. As for fresh water, there are virgin lakes, here modestly known as ponds, pouring out streams by the thousand, to be fished in the fine summer weather by sportsmen not exacting in the matter of accommodation; and the bold bays of the coast line might well invite tourists, who can live on board their own yachts. Hotels are rare in Newfoundland, where sport yields a revenue to the Government in licences.

The true harvest of the island, then, is reaped with nets and hooks, that employ most of the people, as well as some hundred thousand fishermen from Europe and America. "Fish" *par excellence* here is cod, which has brought in as much as two millions of pounds in one year. The banks of Newfoundland, to the east of Cape Race, are the foggy rendezvous of an international fleet, which Mr. Rudyard Kipling has pictured for us, that city of masts and funnels gathered upon a central point of "the Great Bank, a triangle 250 miles on each side, a waste of wallowing sea, choked with dank fog, vexed with gales, harried with drifting ice, scored by the tracks of the reckless liners, and dotted with the sails of the fishing fleet". Dr. W. T. Grenfell, who has been such a good friend to the Labrador fishermen, tells us how the sea will sometimes be literally black with cod, and the air above alive with their eager leapings after prey, the stir in the water increased by a jackal train of sharks, dog-fish, seals, or herring-hogs that follow the school of cod.

"I have myself taken three small cod and twenty-seven caplin from the stomach of one postprandial fish, and have seen an excellent gold ring taken from the stomach of another. A book in three volumes was taken from the stomach of a cod-fish off Lynn, England, and presented to the Vice-Chancellor of Cambridge University. Scissors, oil-cans, old boots, testify to the catholicity of the cod's appetite. Captain Hill, who lost his keys over the side in the North Sea, had them returned to him from the inside



Rounding the Humber River, Newfoundland

Here the light railway which crosses the island runs alongside this picturesque stream, which is typical of the attractions offered by Newfoundland as a tourist and sporting resort. Hotels at present are scarce, but there are delightful facilities for a camping or yachting holiday.

of a cod-fish. Two full-grown ducks have been found in a cod's stomach; the bird's were quite fresh and had apparently been swallowed alive. An entire partridge, a whole hare, six (small) dog-fish, an entire turnip, a guillemot (beak, claws and all), a tallow candle, have all betrayed the omnivorous leanings of some of our friends. But perhaps their devotion to business is best shown by the number of stones taken from their interiors, and merely swallowed for the sake of the corallines which had grown on the stones. Lobsters, crabs, whelk shells, and the like, swallowed *au naturel*, do not seem to require any special digestive precautions. A Newfoundland fisherman had the melancholy duty of forwarding a wedding-ring found in a cod's stomach to the family of a lady who was lost off the Newfoundland coast in the steamship *Anglo-Saxon*."

The largest cod-fish recorded on the

Newfoundland Banks, he says, weighed 136 pounds; and he speaks of one $5\frac{1}{2}$ feet long on the Labrador coast, where the average size is from three to four pounds. The cod live on smaller fish, but are omnivorous as ostriches in gulping down anything that comes their way.

The big steamers, "greyhounds of the Atlantic", blamed for dashing ahead through such a frequented sea, have perils of their own to make them keep a keen look-out, for in the height of summer they may be cutting their way for a day or two through a thick mist haunted by drifting icebergs, which chill the air about them long before they loom into doubtful view, and are not to be warned off by the hoarsest screech of fog-horns. Ill-fated vessels have disappeared on the Atlantic passage, prob-

ably sunk by a silent iceberg, that might crush the heaviest Dreadnought. To elude this stretch of dangerous navigation a scheme is suggested for a submarine tunnel between the island and the main coast.

There are two ways round Newfoundland into the Gulf of St. Lawrence. The wider passage is Cabot Strait, on the south, where Cape Ray stretches to 70 miles from the North Cape of Nova Scotia. The north-west promontory of Newfoundland is separated by only some dozen miles of sea, the Belle-Isle Strait, from the frost-blasted cliffs and wave-torn islets of Labrador, the edge of which belongs to this colony's jurisdiction. That proverbially inhospitable clime, lying opposite the shores of our mild, wet Emerald Isle, is inhabited by some four thousand

¹ "The most desolate place in the world," is the title given to Labrador by Mr. Cuthbert McEvoy in his account of Dr. Grenfell's mission work here. "For the most part the eastern coast rises precipitously from the sea to a thousand and even in some places to four thousand feet of naked, grey, weather-worn rock, broken at intervals by long ribs of black. The iron face of the stupendous cliffs is scarred by storms and the battery of mountains of ice hurled against it by an angry sea. In places the very fury of the elements has wrought a refuge for man by cleaving the precipice and fashioning a narrow inlet or 'tickle' between towering walls of rock to a fine harbourage within. In other places where there are no cliffs, smooth, ice-ground rocks slope inland to

white people and Eskimos, among whom Moravian missionaries have station settlements; but the only place like a town or village is Battle Harbour, on the strait. Such a small fixed population, fishermen in summer, fur-hunters in winter, will in the open season be largely increased by Newfoundlanders crossing over to productive fishing-stations on the mainland side, to which a severe winter may bring starvation, when relief is cut off by freezing storms or ice-floes choking the passage well into spring.¹ The wild interior of Labrador, as yet worthless unless for furs and timber, comes into the bounds of Quebec, not without dispute as to the extent of Newfoundland's vague jurisdiction over a claim as large as our United Kingdom.

starved forests and rugged hills. . . Even when the wind falls the resources of an unkindly climate are not by any means at an end. Then is the opportunity for fogs—thick, widespread, dispiriting—so dense as to make midnight on deck while the sun may be shining brightly at the masthead. During the eight or nine winter months the land is deep in snow and the raging shores are silent. Every bay and creek is paved with thick ice. When summer comes it is blistering hot inland, with swarms of flies, while on the coast it is wet and blustering. Yet even here there are compensations. There are warm, sunny days in August, when the sea is quiet, the sky deep blue, the rocks bathed in yellow sunlight, the air clear and bracing."



Battle Harbour, Labrador, showing Canneries and the Deep Sea Mission

. THE UNITED STATES

The country called America *par excellence* became in 1783 independent as a union of thirteen colonies stretched along the coast from the Bay of Fundy to the neck of the Florida promontory. Their more adventurous spirits had already crossed the Alleghanies to make clearings in the woods and furrows on the savannahs towards the Mississippi; then the thinly-settled new territories were soon organized as the States Kentucky, Tennessee, and Ohio, whose borderlands went on ripening for admission to the Union as Michigan, Indiana, Illinois, Alabama, and Mississippi. Before all of these had grown to Statehood, the Republic doubled its bounds by the purchase from France of Louisiana on the lower Mississippi, with which went a title to the vast plains west of that river. Florida was bought from Spain in 1821. Texas, which had seceded from Mexico in 1836, was admitted among the States in 1845. As a forest fire leaps over some open space, the vigorous nation had not yet subdued the Indians of its western plains when it was making settlements among the Rocky Mountains beyond, and sending pioneers to the western coast. The war of 1846 with Mexico brought its boundaries to the Pacific. Lastly, in 1867, it bought cheap from Russia the outlying north-western corner of the continent called Alaska, cut off from an otherwise compact dominion by British Columbia. Apart from the loosely-estimated area of Alaska, this Republic now covers about three millions of square miles, with a population counted at the last census as some ninety-two millions, to which may be added twenty millions more for its recently-acquired dependencies and the natural rate of increase.

Such astonishing progress went on for nearly a century with but few checks. In 1812 a war with England wasted the resources of both nations, and helped to keep alive a resentment that should never have been generated. The fitful struggle with Indian bands made an irritation rather than a peril. The Mexican war of 1846 laid its heaviest burden on the Puritan conscience. The Spanish war showed how well America can defend herself at short notice. The most serious troubles of the Republic hitherto had been from within, bred by an opposition in character and interests between the original settlers of New England and of Virginia.

A chief bone of contention was the "peculiar institution" of negro slavery, by which the Southern States worked their plantations of cotton, tobacco, and rice, while the Puritan Northerners prospered by trade, manufacture, and agricultural labour in the sweat of their own brows. At the Revolution there was no question of freedom and equality for blacks. The majority of the citizens, North and South, took slavery as a matter of course, yet some of the best republicans were concerned to point out how it might contaminate the public weal. A growing spirit of philanthropy, which had emancipated negroes in the Northern States as in Britain, was able to prohibit the importation of black flesh, thereby enhancing its value, especially when the opening up of fresh territories on the south-west and the increased demand for cotton brought slave labour into wider play. As the eyes of the Northerners were opened to the shame of keeping fellow-men in bondage, the South became more blinded by self-interest, and tightened its

hold on the slaves; yet the very vehemence with which the system was defended betrayed a conscience not wholly at ease.

The Northern sentiment was of no strong temper in general; even sympathetic philanthropists too easily took for granted that by degrees slavery would die out, somehow or other, all over America. On the contrary, the older Slave States became breeding-grounds of human cattle for their new neighbours; and the family feeling which had treated the negro as a favourite horse or dog, largely gave place to the brutalities of raising stock for the market. Against this wrong arose earnest champions. In the van of the Abolitionists had all along marched peaceful Quakers, who, though they would use no carnal weapons, exposed themselves to sore perils in the cause of humanity. By them and other sympathizers a secret organization was formed for helping negroes to escape north, and by its machinery, nicknamed the Underground Railway, more than twenty thousand slaves were smuggled into Canada and the Free States, besides many who fled towards the North Star with no such furtherance. This leakage of their movable property provoked the slave-owners into cruel outrages upon Abolitionists, who had to suffer unpopularity and mob violence even in some of the northern cities. While America's chief poets and some of her preachers took the side of the oppressed, men of the world were still at the best so lukewarm that in 1850 came to be passed the Fugitive Slave Act, sharpening the law which required the extradition of runaways from a Free State. The working of this law had almost roused New England to revolt. Feeling ran strong in the young Western territories, the permission or prohibition of slavery on which became a burning political question. In Kansas the excitement rose to a guerrilla civil

war between the two parties. One of its heroes was John Brown, whose ardour flamed into the noble insanity that drove him to his attack upon the arsenal of Harper's Ferry.¹

John Brown's body proved the seed of a more resolute denunciation of slavery. The Northerners had begun to repent of their compliance with it for the sake of preserving the Union. The election of Abraham Lincoln, a known sympathizer with the Abolitionists, was the signal for civil war. The Southerners, trusting in their "chivalrous" ancestry, judged it easy to shake themselves loose from the commercial and industrial brethren with whom they seemed unequally yoked together. But the Yankee traders had the same blood in them, and resolutely accepted the challenge of civil war. For over three years, with the loss of half a million lives, went on that struggle, at the end of which one of America's patriotic poets might boast—

"Earth's Biggest Country's got her soul,
An' risen up Earth's Greatest Nation".

It seemed still possible that this nation might yet prove too great for solidarity; albeit State and sectional patriotism tend now to be absorbed in a comprehensive loyalty to the Republic. While the stifled antipathy of the South towards the North might again be fanned into flame, there has appeared a conflict of interests between the East and the West which more than once threatened to open another line of fissure. And seeds of fresh distraction have been sown on this exuberant soil. The Secession war freed and gave citizens' rights to a population of negroes at present numbering not far short of ten millions, some of whom appear to be worse off than they were in slavery, while the mass have at least a chance of improvement, though the Southern States, in which they are most numerous, have con-

¹ "Looking back over the centuries to the Crusaders," says Mr. M. D. Conway himself a champion in this modern crusade, "led by the fire-heart of Peter the Hermit to rescue the Holy Places of Palestine from the infidel's tread, we are thrilled by the devotion of men who went to their graves as to their beds, that the sepulchre of the Holiest might become the shrine of the believer; yet I must believe that when Time

has given the needed perspective, the romance that clings to those heroes of a creed will fade beside the halo that will shine around the head of the Crusaders in that moral struggle which has been going on for more than thirty years in America, whose higher object has been to rescue the Holy Places of Humanity - not the sepulchre of Christ, but the shrine of His living presence."



Alabama "Coons": negro children listening to the concertina

trived property and educational qualifications to bar them from voting. Such an alloy may prove a danger to the Republic, which has been more successful in incorporating other alien elements. The gross fanaticism of Mormon polygamy had to be brought into line with Christian institutions. Immigrants from Europe were absorbed, easily in the case of law-abiding Scandinavians, Teutons, and Saxons, not so easily as regards the hot blood of Latin and Slav strangers, driven from home by extreme poverty, often blinded by ignorance and maddened by oppression. Irish immigrants have formed a very marked reinforcement, threatening to revolutionize Puritan New England by their healthy prolificness, by their foreign creed, and by their resentment towards England. Readily admitted to citizenship, a little prosperity soon heartily nationalized most of these new-comers into as proud republicans as the sons of the soil. But America has now seen cause to put strong checks upon the admission of all and sundry partners in her well-being; and she

would bar out the Mongols, who at one time seemed to be in the way of forming a yellow servile caste, strongest upon the Pacific coast, and still numbering over 100,000. She has next to deal with the difficult matter of educating a class of inferior colonial dependents to the status of equal citizens.

This is a new feature of American life, which may lead to remarkable "developments". Hitherto the Republic had made a point of keeping to her own bounds, while by her Monroe doctrine warning off all European Powers from intrusion in America. Within the last few years, against the wish of many prudent citizens, she has yielded to a movement of expansion which makes her mistress of several island groups, near and far, and saddles her with an armament for the due defence of such acquisitions. As America thus enters into the game of the old nations, she will find new cares and new dangers of collision with her fellow sea-Powers. Already these extended relations seem to have gone to modifying her traditional grudge against the mother-country

The World of To-day

So long as she stood in no serious danger of quarrelling with any Power but Britain, "twisting the lion's tail" was a favourite exercise of politicians, who for their own purposes kept alive an antipathy that has long died out on this side of the Atlantic, so much so that the danger of it was hardly realized by our people, till President Cleveland's threatening message set all thoughtful men shuddering at the prospect of a struggle which would be a calamity to civilization.

The Constitution of the United States, by this time multiplied to four dozen, with the soaring eagle for their badge and *E pluribus unum* for their motto, is a double machinery worked by the same motive power, popular will, and interlacing State rights into sovereignty for national purposes of the Union. The design is a balance of centrifugal and centripetal forces, which Lord Bryce illustrates by the example of an English university and its colleges; but of late there appears a tendency towards centralization of power. The central Government has its seat in the insulated Federal district about Washington, populated by officials and their dependents. Congress consists of a Senate of two members from each State, irrespective of size, and a House of Representatives, elected in proportion to population. The former are elected for six, the latter for two years. There is on foot a movement for reforming what seems the anomalous composition of the Senate, and its indirect election by the State Legislatures; but, as it is, it makes a more influential organ of public opinion than our Upper House. The President, who must be a native-born American, is—with the Vice-President, who takes his place in case of death, as happened when Mr. Roosevelt succeeded the murdered McKinley—chosen among candidates previously nominated at party conventions for the suffrages of an intermediate body of electors sifted out by popular vote, so distributed through the electoral colleges that a successful candidate may have an actual minority of supporters in the nation. This citizen sovereign, who, like a pope or an archbishop, is less often a man of natural eminence than the

product of party compromise, has more real power than most kings. He may veto any Act of Congress, which, however, can be carried over his veto by a majority of two-thirds in both Houses. He governs through a Cabinet of Ministers, who do not sit in Congress. He appoints the judges that administer the United States laws, whose Supreme Court is the fly-wheel of the Constitution as its interpreter in case of doubt or collision with the laws of the separate States.

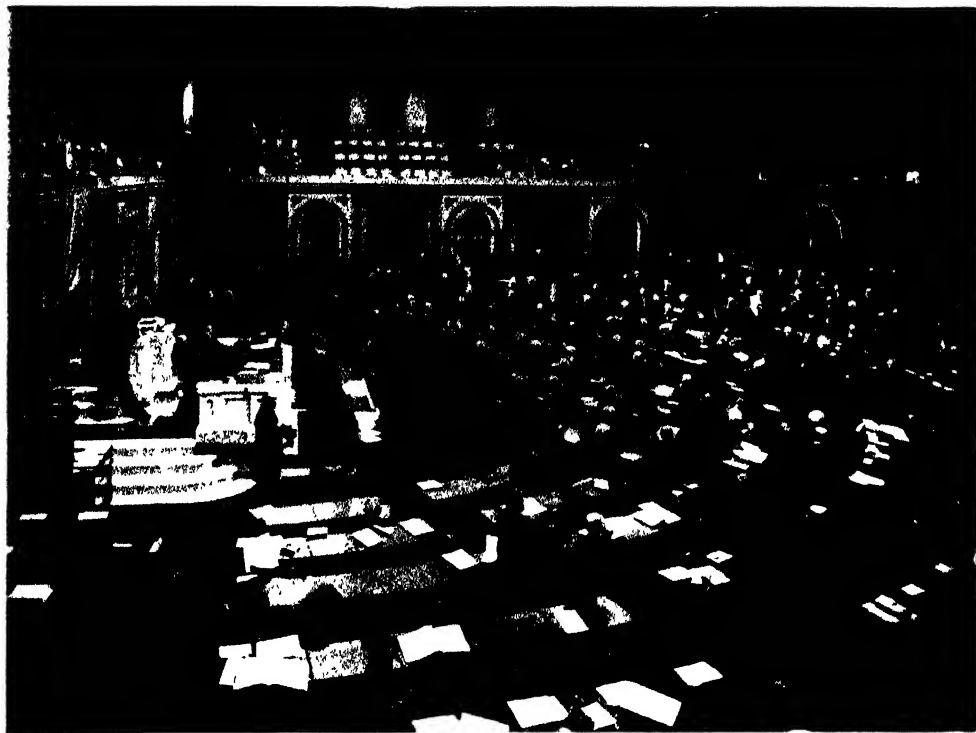
Each State, with its own Executive and Legislature, makes its own laws, administered by a State judiciary that is commonly of popular election, and differing much on certain points, notably as to facilities for divorce. In some new States has been introduced the Swiss machinery of Initiative, Referendum, and Recall, bringing the popular will more readily to bear on the Legislature. Suffrage, slightly varying in the conditions of some States, is in most given to adult men, and in several extended to women, an extension bidding fair to become general. The pioneers in this matter were the young States of the West, where, in 1917, Montana elected the first lady member of Congress. Citizenship is readily granted to foreigners on very short probation, may in some cases be almost forced upon them by State laws which else make it difficult for them to hold their property, while certain States have laws artfully devised as traps for the foreign investor, his money more welcome than his influence. Many of the States were first admitted as territories, which, till their growth entitled them to full rank, had popular assemblies with executive and judiciary officers appointed by the Federal Government, a status still held by outlying dependencies like Alaska and Hawaii.

Funds are raised for national purposes by the Federal Government from customs-duties and revenue on liquor and tobacco; and for State and local needs chiefly by direct taxes on real estate. The individual States, as well as the Commonwealth, can contract public debts, and repudiate them as some of their creditors know.

The States are divided into counties, but further subdivisions, as townships, districts,

wards, hundreds, &c., show a certain British irregularity of nomenclature and function, as do the State constitutions originally modelled on the colonial charters granted by our kings. The new Western States are laid out in equal-sized, regularly-shaped counties, each divided into sixteen townships, 6 miles square, which again are surveyed into thirty-six square blocks, or sections, and these into

legislative, and judicial functions has, as Lord Bryce points out in his weighty work on the American Commonwealth, caused needless friction in the working of government, where sometimes it seems as if captain, steersman, and engineer were each taking a different course, and in moments of peril a strong man like Lincoln must act with something like dictatorial authority, as he can do



The United States House of Representatives in Session

Underwood & Underwood

quarter-sections of 160 acres each, forming a homestead farm, given almost free, so far as these lands will go, to any settler who will occupy and improve his allotment.

A chief difference between the British and the American Constitution is, that while the former has gradually grown up as a body of tradition modified by experience, the latter is confined by the hard-and-fast lines of an instrument which did not cover all future contingencies. The system of checks provided by separation of the executive,

if backed up by popular feeling. At all times the House of Representatives is a far less influential body than our House of Commons, while the Senate has a higher status than that of our Upper House, which dares not persistently oppose the will of the people. A very important part is played by the Supreme Court, that has done much to shape the provisions of the Constitution, refitting them to unforeseen conditions, and that, with occasional lapses, has usually shown a spirit above party politics.

The World of To-day

Lawyers take a leading part in American public life, a profession that here unites what we divide into bar and office practice. As with us, the judgeships of the Supreme Court, and of the Federal Circuit and District Courts, are usually given as rewards of party service, yet, the appointments being permanent, without corrupting their administration of the law. These courts have a high reputation for ability and impartiality. The same cannot always be said of the legal authorities elected to carry out State laws, who are often accused of being open to illicit influences, and will naturally be apt to have an eye on their own re-election. On the whole, the law is well respected, even if its ministers be not all very respectable. But it seems a blot on the American temper, that while in some cases gross crimes can hardly be brought to justice, in others the people are occasionally moved to take the law into their own hands. What is called lynch-law has been scandalously common in the case of negroes accused or suspected of rape upon white women, then often put to death by exasperated mobs with atrocious tortures that should shock a Christian community. There was more excuse for the Vigilance Committees, by which rough new settlements have been summarily purged of dangerous elements before the orderly working of law could be brought to bear for protection of life and property. Another reflection on American justice seems to be the existence of a private police force, the celebrated Pinkerton Agency, which employs hundreds of detectives to be hired out, and has supplied regiments of armed mercenaries to resist the violence of a strike.

Americans are proudly attached to the institutions that inspire so much oratory on July 4th celebrations of their Independence; but it seems that "effete monarchies" may have no great cause to envy a republican freedom which is not more real or more efficient than our own for all purposes of good government. In this country, at least, the name "politician" has not come to have such an ill-savour, and our noblest citizens, by birth or attainments, still think it an honour to be called

to the councils of the nation. In America, where the prestige and influence of hereditary rank are replaced by the might of the dollar, the tricks of electioneering, the childish noise and excitement of "campaigns", the blatancy of ignorant demagogues, go to disgust the better class of citizens, with the result that political power falls too much into the hands of cunning schemers, who often, as in the case of the notorious Tammany organization, are able to tyrannize over the public interest. We are not tempted to exchange our dukes and privy councillors for "bosses" and "rings"; and a king, even were he of gilt gutta-percha, might seem to represent the nation as well as a president, manufactured as he has often been by the party machinery well greased with money. Nothing, unless the pretentious ignorance of some leaders of this people, strikes an Englishman as much as the shrewdness and contented contempt with which intelligent Americans expose the weaknesses of their political system, even if strongly resenting any criticism from outsiders. An ex-President of the United States, who ought to know, was reported as denouncing the whole system of "politics" for a hot-bed of greed and corruption. President Roosevelt, in a magazine article, unsparingly revealed the sores of municipal government. Lord Bryce takes a rather favourable view of American institutions, but his apology comes to public affairs across the Atlantic being not worse managed than they have been with us in the past, whereas this republic professes to set an example to our "obsolete monarchy".

As to the well-balanced parties, the Republicans and the Democrats, to an outsider it appears as if they might as well be called Tweedledum and Tweedledee. They were originally Federalists and Republicans—the latter the present Democrats—who differed in preferring respectively English associations and French revolutionary sentiment as design for their new political structure. What principles they began with have been shifted and exchanged as well as their names, in the course of time;

but there is usually some question, as that of the tariff, or the coinage of silver, different views of which make a standard for their respective members. Roosevelt's dynamic earnestness made a split in his own party; and by Mr. Wilson's unpopular foreign policy the Democrats also may now be broken up into new combinations. Membership of either has been to some extent an inheritance of family or locality. The Republicans are stronger in the north, the Democrats in the south, where they have been able to neutralize the vote of those nominally equal negro fellow-citizens, who looked to the Republicans as their deliverers from slavery. The Democrats, as champions of State Rights, were in opposition, rather, to Lincoln's government. One marked reform in our day was the opening of most posts in the Civil Service to competition, whereas under previous administration "the spoils to the victors"

had been openly proclaimed as the rule of the political game. There are at present hopeful signs of a new public spirit uplifting itself against political knavery: the election of Presidents like Roosevelt and Wilson showed how men of high character and intellectual attainments become more willing to take their part in politics. But still, if all stories be half-true, private interests, mean cabals, and artful manipulation of ignorant voting power play too great a part in the life of a republic whose noble ideal is government by equal rights for the good of all.

There remains to be noticed America's part in the Great War, which for this as for other countries must have results hardly yet estimable. In that momentous clashing of powers and principles, Uncle Sam's conduct illustrated the mixture of the practical and the ideal that has been noticed in his character.¹ At first he stood

¹ James Russell Lowell, with an eye mainly on Massachusetts, thus draws a portrait of the Yankee Jonathan transformed from John: "New England was not so much the colony of a mother-country, as a Hagar driven forth into the wilderness. The little self-exiled band which came hither in 1620 came, not to seek gold, but to found a democracy. They came that they might have the privilege to work and pray, to sit upon hard benches and listen to painful preachers as long as they would, yea, even unto thrity-seventhly, if the spirit so willed it. And surely, if the Greek might boast his Thermopylae, where three hundred men fell in resisting the Persian, we may well be proud of our Plymouth Rock, where a handful of men, women, and children not merely faced, but vanquished, winter, famine, the wilderness, and the yet more invincible *storge* that drew them back to the green island far away. These found no lotus growing upon the surly shore, the taste of which could make them forget their little native Ithaca; nor were they so wanting to themselves in faith as to burn their ship, but could see the fair west wind belly the homeward sail, and then turn unrepining to grapple with the terrible Unknown. As Want was the prime foe these hardy exodists had to fortress themselves against, so it is little wonder if the traditional feud is long in wearing out of the stock. The wounds of the old warfare were long a-healing, and an east wind of hard times puts a new ache in every one of them. Thrift was the first lesson in their hornbook, pointed out, letter after letter, by the lean finger of the hard schoolmaster, Necessity. Neither were those plump, rosy-gilled Englishmen that came hither, but a hard-faced, atrabilious, earnest-eyed race, stiff from long wrestling with the Lord in prayer, and who had taught Satan to dread the new Puritan hug. Add two hundred years' influence of soil, climate, and exposure, with its necessary result of idiosyncrasies, and we have the present Yankee, full of expedients, half-

master of all trades, inventive in all but the beautiful, full of shifts, not yet capable of comfort, armed at all points against the old enemy Hunger, longanimous, good at patching, not so careful for what is best as for what will *do*, with a clasp to his purse and a button to his pocket, not skilled to build against Time, as in old countries, but against sore-pressing Need, accustomed to move the world with no *ποῦ στω* but his own two feet, and no lever but his own long forecast. A strange hybrid, indeed, did circumstance beget, here in the New World, upon the old Puritan stock, and the earth never before saw such mystic-practicalism, such niggard-geniality, such calculating-fanaticism, such east-iron-enthusiasm, such unwilling-humour, such close-fisted-generosity. This new *Graculus esaniens* will make a living out of anything. He will invent new trades as well as tools. His brain is his capital, and he will get education at all risks. Put him on Juan Fernandez, and he would make a spelling-book first, and a salt-pan afterwards. *In cælum, jussuris, ibit*—or the other way either—it is all one, so anything is to be got by it. Yet, after all, thin, speculative Jonathan is more like the Englishman of two centuries ago than John Bull himself is. He has lost somewhat in solidity, has become fluent and adaptable, but more of the original groundwork of character remains. He feels more at home with Fulke Greville, Herbert of Cherbury, Quarles, George Herbert, and Browne, than with his modern English cousins. He is nearer than John, by at least a hundred years, to Naseby, Marston Moor, Worcester, and the time when, if ever, there were true Englishmen. John Bull has suffered the idea of the Invisible to be very much fattened out of him. Jonathan is conscious still that he lives in the world of the Unseen as well as of the Seen. To move John, you must make your fulcrum of solid beef and pudding; an abstract idea will do for Jonathan."

The World of To-day

somewhat aloof in the attitude of a critical spectator, not quite clear about the issues at stake, as in his own Civil War, Britain had shown unsympathetic misunderstanding before it was openly proclaimed a struggle against slavery. Public opinion in the States soon, indeed, showed signs of division. One part of the nation grew warm in the cause of the Allies; another held to the traditional American policy of not interfering in European affairs. The latter view was backed by politicians' respect for the vote of a strong body of German origin, many of them having left their native land through discontent with its government, yet now feeling blood to be thicker than water. Irish soreheads also took this chance of pressing their resentment against Britain. On the other hand, Russian, Polish, Bohemian and Slav immigrants could have little love for their late masters, but had less leverage on the public policy of their new countrymen. So for a time America sat on the fence of the arena, and seemed to be most interested in making enormous profits out of the needs of the combatants.

The prudent hesitation and enigmatical utterances of its President for a time obscured our glimpses of the people's varied sentiments, while the late ex-President Roosevelt came out emphatically on the side of what he at once recognized as a fight for democratic freedom. The clang and the glow of the distant battles, telephoned and filmed by press enterprise, more and more stirred American chivalry out of a colder mood that was never indifferent; and the criminal folly of our enemies went far to turn Transatlantic sentiment against them. Such inhuman outrages as the ravaging of Belgium and the sinking of the *Lusitania* roused Americans from their neutrality. When minor republics of South America were found willing to go up to Armageddon, it behoved their mother no longer to look idly on, or confine its exertions to tending the wounds of the victims. Midway in the war, the United States entered it on the side of the Allies.

Once having made up its mind, this

Republic acted with characteristic energy and unselfish loyalty. Like other belligerents, she regimented the nation to keep step and rank on a movement in which individual rights must for the nonce be set aside. Hitherto she had been content with an army of some 100,000, its work chiefly policing troubled frontier districts, and its ranks largely recruited by foreigners, while the States kept up the *cadres* of a local militia, whose parading in peace-time had much of a holiday air. But the experience of the Civil War had shown how readily great military forces can be organized among a spirited people; and now America called forth a host millions strong, not sticking at compulsion to swell the armies gathered round cores of voluntary enlistment. At the same time, the Federal Government threw itself into the task of increasing its small but efficient navy, soon doing most valuable service to what was now the common cause.

America's military effort could not at once be brought to bear, since the conditions of modern warfare demand a severe apprenticeship. While its sons underwent a training long enough to gall gallant impatience, the Germans professed to laugh at a citizen soldiery as they had mocked our "contemptible little army" that held the Thermopylæ of France against their onrush. But the laugh was on the wrong side of their mouths when those raw warriors began to appear on the scene of action, coming over by fleet-loads in the teeth of the enemy's submarines, till by the end of 1918 there were nearly two millions of them on or behind the battle-fields, where their prowess at once made them conspicuous. There can be no doubt that this reinforcement went to break the back of a camel already heavily burdened in the flounderings of defeat, albeit Uncle Sam's boys, after their manner, may have been a little too boastful in crowing that they won the war in which France and Britain had for years been withstanding the military power that now failed to trample down Europe.

Before that strenuous contest came to a stand, the German Government had seen cause for slyly appealing to America as a



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Politics in the United States: the crowd at the nomination of a candidate for the Presidency

likely advocate of better terms of peace than it deserved. President Wilson's high-souled humanity, and his anxious concern that so catastrophic warfare should make an end of war between civilized nations, were not appealed to in vain. His position as head of a nation seeking no advantage for itself, as well as his character, gave him a dominant influence on the peace settlement, in which his excellent intentions helped to pave the way for such protracted disputes that his proposed League of Nations, at first so loudly acclaimed, by the end of a year had done nothing or little to give order and concord to half-starving Europe, full of bitter grudges and smarting wounds, on which high ideals sought in vain to apply the balm of sweet reasonableness.

The President had come over to Europe

to have a finger close in the pie, from which politicians of rougher fibre were readier to pick plums in more selfish interest. What had not been well recognized, on this side of the Atlantic, was that he came without a mandate from his nation, in whose name he secured for himself a say among the Allied councillors which is understood to have modified their plans and dispositions to some extent, if not to have thrown down apples of discord that delayed their peace-making labours. But when he went home to America, Europe was startled to learn that he had been signing bills which his firm refused to honour, at all events without due consideration. Party feeling in the States blazed up in opposition to this discredited ambassador, whose serious illness came as a misfortune prolonging the deadlock between a recalcitrant Legislative and

an Executive held to have taken too much on itself. It appeared that there was a considerable body of American opinion, which, while willing to applaud from a distance international attempts to keep the world at peace, had no mind to take any share in the responsibility, as had been hoped in Europe when it listened to the President's edifying sentiments. Thus came about this curious situation, that the Ally last to join in war, and first to offer peace, was a chief obstacle to its conclusion by hesitating to join the Amphictyonic Council of civilized nations.

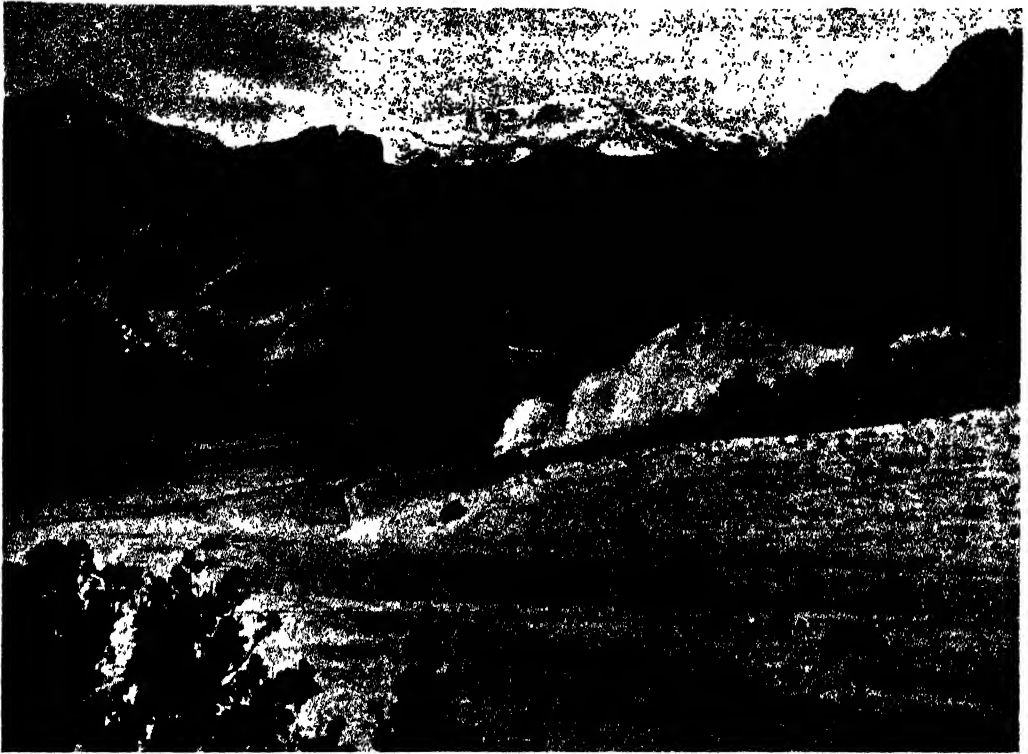
In France and Britain now arose outcries against what was denounced as the selfishness of the one people that had indirectly profited by a war leaving Europe poverty-stricken and exhausted. On the other hand, Viscount Grey, sent by our Government on a special mission to the States, made himself their interpreter in reminding us how they were at least consistent in a policy of reluctance to entangle themselves in European complications. What we should remember is that Uncle Sam's generosity to the suffering peoples was as marked as his want of confidence in their Governments. What the Americans themselves may forget is that their isolation is not so securely maintained in an age when international trade rivalry can wage as cruel war as did the arms of any Kaiser, and when indeed the Monroe doctrine might be more readily challenged by far-flung sea power and fleets of destroying air-craft.

Natural complaint was made of America's being offered the same representation in the League of Nations as the comparatively insignificant British colonies; and the Senate showed strong suspicion of Presidential commitments that might engage the country in fresh military adventures. The confusion grew worse confounded through Wilson's unexampled action in dismissing the Foreign Secretary on a charge of having taken too much on himself during the President's incapacitating illness, the effect of which

seemed to be revealed also by a violent note threatening to withdraw his co-operation in European peace-making unless his voice could still be heard on the settlement too long delayed by his own country's procrastination. At the same time the Republican Senators, by the two-thirds majority needful in such opposition, pronounced against the original scheme of a League of Nations and proposed another form of council to deal with disputed problems. American public opinion seemed to fall into such confusion over the quarrel between the Executive and the Legislative, that foreigners may well feel bewildered by a strife of factions, the upshot of which was to delay the conclusion of peace. The Presidential Election of 1920 of course turned largely on this hotly debated question, as on other considerations, and proved a signal defeat for the party in power. Six months before the voting, one candidature is reported as having already cost £250,000, while another would-be Cincinnati declares himself handicapped by having no more than £40,000 to spend in recommending himself to the electorate.

The adventure of for once waging war in the Old World had so thrown out of gear the machinery of American party politics, that, for the first time, a promising candidate for the Presidency announced himself ready to be nominated as either the Republican or the Democratic candidate. This goes to show that, as in the case of our own political life, it is difficult to predict the full results that such a stirring experience may have upon the traditions of a great people who, for all the short-sightedness and self-seeking of their politicians, have done much to contribute a new verse to our loyal anthems:—

“ Lord, let war's tempest cease,
Fold the whole earth in peace,
Under thy wings!
Make all the nations one,
All hearts beneath the sun,
Till Thou shalt reign alone
Great King of kings!”



The Gateway to the "Garden of the Gods" (near Colorado Springs), showing Pike's Peak in the distance

THE COUNTRY

In surveying so huge a country, we must take for granted some notion of the relative position and extent of the different States, from Texas, as large as a great European kingdom, to Rhode Island, as small as an English county, from populous New York to dry and dusty Nevada, whose inhabitants would not fill a second-rate city. Perhaps that is too much to take for granted, as the British reader might not be able to say off-hand how Rutland lies from Hunts, or to name all the counties that border on Hants. But the American citizen is well schooled in the divisions spread out under the Eagle; and even to us the older ones have become more or less familiar conceptions, though we may not be versed in their by-names, as the "Empire State"

and the "Bay State", nor in the contractions by which they are postally styled among a people much pressed for time—*Pa.* for Pennsylvania, *Va.* for Virginia, *Mass.* for Massachusetts, and so on; nor in the neighbourly nicknames given to their inhabitants, as the "Knickerbockers" of New York, the "Hoosiers" of Indiana, the "Corn-crackers" of Kentucky, and the "Green Mountain Boys" of Vermont. At all events, space forbids us to enumerate the fifty States and territories of the Union in order; and our readers must be content with little more than a general idea gained by crossing their centre, first from east to west, then from north to south. Another matter here to be taken for granted is the network of railway lines, canals, and other

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means of locomotion with which the Americans have made haste to cover almost every part of their country as soon as, or even before, it came to be occupied.

Best known to us by name and fame are the senior States of the Atlantic Plain and its mountain background, which, since they cut themselves off from their mother-country's rule, have not ceased to be in touch with its manners, its feelings, and its literature, and which have produced such a number of authors through whom the scenery of Massachusetts, New York, and Virginia hardly seems foreign to an English reader. In lean, stony New England the bonds of kindred appear least roughly broken. But the strength of American growth has set towards the central region; and its energy flows on to the Far West, where life more readily shakes off old associations, and where is springing up a nation that begins to look on the East as a different country. "Go West" has long been the motto of Uncle Sam's enterprising sons, from the days when they had to found their backwoods homes among wild Indians and wild beasts, and to grow up with the country they cleared. It is now easy to go West by several trunk lines crossing the continent from the great ports on the Eastern seaboard. The journey of more than three thousand miles takes five or six days, over such an extent of the earth's surface that, the sun having been outrun by an hour at every fifteen degrees, the trains go by clocks put back successively for Eastern time, Prairie time, Mountain time, and Pacific time. From North to South is hardly half that distance, but far enough to account for a wide range of climate and productions.

The first thing that strikes a Briton almost anywhere on this continent is the greatness of its scale. There are enormous tracts of commonplace monotony, where one sees little but flat fields, square houses, and straight or zigzag fences, the blank spaces often adorned with staring advertisements of quack medicines and the like. On reaching the mountains, in turn, one passes through a long succession of magnificent scenes, any nook in which might win a tourist reputation.

The general outline of the Eastern chain, indeed, is not markedly rugged, as may be guessed from the name Laurel Hill given by early settlers; and its valleys are mostly tamed by culture. The Appalachian or Alleghany Mountains extend northward from Alabama through most of the Atlantic States. In the south they are parted into three ridges, that have their highest point (6711 feet) in the Black Mountains of North Carolina. In the north, drawn nearer the sea, the range is more broken up into irregular groups, bearing such names as the White Mountains, the Green Mountains, the Adirondacks, the Catskills, beneath which lie beautiful lakes and watercourses, set among forests that show themselves most glorious in the brilliant hues of autumn, and have a brief season of dying loveliness in the haze of the Indian summer. The highest point here is Mount Washington of the White Mountains (6293 feet). A great part of New England is roughened by heights rising to a few thousand feet, which afford summer resorts for the inhabitants of its cities; and in the north-western corner, the States of Vermont, New Hampshire, and Maine, a thinner population wrests its livelihood from rough ground where the pioneers were adventurous hunters and fishermen.

Outside this Eastern mountain chain, the Atlantic Plain is, in the north, a comparatively narrow stretch, far submerged into the ocean, its shore deeply indented by estuaries and inlets that form natural harbours, the longest of them Chesapeake Bay, almost cutting the State of Maryland into two parts. To the south, this plain broadens out in low-lying flats often blighted by stagnant water, the here smoother coastline edged by sandy islets and shallow lagoons. The Great Dismal Swamp in the south of Virginia is the most famous of those wastes, once a safe refuge of slaves and other outlaws, its heart a sullen lake flooding out among jungles of cypress and cane, that still offer gloomy retreats; but by drainage and cultivation it is being gradually reclaimed, and the same change will wipe out other swamps of Carolina, Georgia, and Florida,



The "Call of the Wild": fishing on a stream among the Adirondacks

Detroit Photo Co.

when all the naturally wholesome land has been taken up. The chief rivers that seam this region—the Penobscot and Kennebec of Maine; the Connecticut and Delaware, giving names to two States; the Hudson of New York; the Susquehanna, flowing through Pennsylvania into Chesapeake Bay, which also receives the Potomac, Rappahannock, and James of Virginia; the Roanoke of North Carolina; and the Savannah, dividing South Carolina from Georgia—are noble streams, but their navigation is sooner or later barred by falls as they come down from the mountain background. In the far south projects Florida, a low expanse much broken by lakes and pools, and by streams walled with semi-tropical jungles, under a winter climate that makes this the antipodes of Maine, stretching its leafless woods and frozen waters up into Canada. Below the southern point, Cape Sable, the low coast

of this peninsula is frittered away into sandy islands called "keys", one of them the port of Key West, now joined to the mainland by an unsurpassed feat of engineering enterprise, a railway banked through the swampy "Everglades" of Florida, then bridged from islet to islet, at one point crossing by a viaduct 7 miles long, till at Key West the trains can be run on to a leviathan ferry-boat, carrying them over the mouth of the Mexican Gulf to Havana.

The large States of New York and Pennsylvania extend to the west of the mountains, that also divide Virginia into two parts. On the farther side the Ohio River separates Kentucky, "dark and bloody ground" of old Indian days, from Ohio, stretching north to Lake Erie. In the western Alleghany range, by which flows the Ohio's upper course, abound coal, iron, and petroleum, making this the Black Country of America;

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but there are also stretches of virgin forest and districts of rare fertility, like the "blue grass region" of Kentucky, below half-tamed highlands where, in our generation, men have righted their wrongs by the red hand.

The south-westward course of the Ohio shows how we are now descending upon the great valley of the Mississippi, to which other streams flow through the Alleghanies, especially in the south, while those of the north, even when rising on the western side, force their way rather to the Atlantic. The Ohio valley, into which pioneers like Daniel Boone began to push over the mountains at the end of the colonial period, was part of the thick backwoods, soon found by advancing settlers to open out in savannas; and farther west they gave place to the rolling Prairies, vast expanses of spring-flowered greensward, swelling into thickets of grass sometimes high enough to hide a horse, broken by clumps of timber and by low woods about the sluggish streams and stagnant ponds. Writers like Fenimore Cooper and Washington Irving abound in enthusiasm for a region whose romance has been ploughed and fenced away; and its name covers the Prairie States of Indiana, Michigan, Wisconsin, and Illinois, stretching north of the Ohio to the great lakes. South of the Ohio and its Kentucky affluents, Tennessee, Alabama, and Mississippi fall to flatter and hotter ground, where plantations have had to struggle with swamps and rank cane-brakes replacing the wholesome pastures of the north. The Prairie region extends east of the Mississippi for a greatest breadth of 1000 miles.

To the Mississippi valley and its States we shall presently come back from another quarter. Westward the land begins to rise again by a gentle incline towards the Rocky Mountains, over a space of several degrees left almost blank or marked as the "Great American Desert" in maps of our childhood; but since then exploration and settlement have been fast engraving on its surface river-courses, roads, railways, with the dots that denote growing towns; and the Government now undertakes to reclaim

its worst stretches of barren sand-waves by the planting of forests, while in the south the arid wastes of New Mexico and Texas are being won by irrigating canals or by the sinking of wells with wind-mills chained to them as slaves; and the same care spreads the rich wheat-fields of Minnesota and Dakota, neighbouring those of Canada, into the once wild cattle-ranges of Montana. Out of richer bottom lands we rise upon the dry and bare Plains, distinguished from the Prairies by their thin coat of pale curly buffalo-grass, and by a usual absence of timber larger than sage-brush, unless in the sunken watercourses. As exceptional features here and there, like islands on a sea of calm green, stand up swelling sand-hills and flat-topped "buttes", beside which rivers have cut deep beds. This region is not yet so thickly populated as to hide the muddy pits where buffaloes once wallowed, when the soil was strewn with their bones and more rarely scarred by trails of human skeletons, broken meat-tins, and other rubbish, marking the passage of the early pioneers; and often it is still found mined for miles by the burrows of "prairie-dog towns". When not swept by terrible storms and driving snows, at times by tornadoes that may uproot the homes of thousands, the air of the Plains will be ethereally pure and clear, displaying the Rocky Mountains' summits to emigrant trains while still some days' journey from this arena of new hardships and perils. Beyond the Missouri, by imperceptible degrees, the long slope rises as high as the Alleghanies in the States of Nebraska and Colorado, as in North and South Dakota, home of the tribes nicknamed Sioux. The rails, the advance of which was vainly resisted by those fierce warriors, are like rivers depositing alluvial beds of cultivation and population. At Omaha in Nebraska, now a place of 125,000 inhabitants, white men, perhaps still alive, have heard the shrieks of a comrade being flayed alive by Indian revenge. Denver, "the Queen City", capital of Colorado, standing so high and dry as to make a mountain health resort, has in one generation grown to have

220,000 people, and to be junction of several railway lines that, when first made, were fain to name their stations after the forts whose garrisons had much ado to keep their scalps safe from Indians. In the same region Colorado Springs, 6000 feet above the sea, is a Davos or Engadine for the States; and Leadville, over 10,000 feet, their loftiest city, populated through its gold- and silver-mines.

Travellers on the first transcontinental lines through the central States told us how then "nature is more and more, man less and less". A billiard-table is R. L. Stevenson's comparison for great expanses of the Plains, which he found spangled by sunflowers, and broken by distant dots that, as the train drew nearer, grew into wooden cabins; else, all the prospect was an "empty sky, an empty earth", with the railway running straight across like a cue laid on the green cloth. As we approach the mountains, now more rapidly by the all-conquering rail, the ground becomes broken by outlying masses like the Black Hills of Dakota, by straggling spurs, and by strange freaks of nature. Patches of the alkali desert, more extensive on the western side, are met here, ponds edged by salt, and knolls of barren sand which the sunshine paints like snow among the various mirage-delusions that hang over that scorched surface. Great stretches are the so-called Bad Lands, deeply scored by countless channels, whose soft walls have crumbled in the air or been carved by water into the most extraordinary forms, often mocking the works of man, so as to suggest a ruined city or a giant cemetery.¹ And the very foot-hills, as they are called,

¹ "In the Bad Lands the earth seems to have been flayed alive—no skin or turf of verdure or vegetable mould anywhere—all raw and quivering. The country looks as if it might have been the site of enormous brickyards; over hundreds of square miles the clay seems to have been used up to the depth of fifty or a hundred feet, leaving a floor much worn and grooved by the elements. The mountains have been carved and sliced but yesterday, showing enormous transverse sections. Indeed never before have I seen the earth so vivisected, anatomized, gashed—the cuts all fresh, the hills looking as new and red as butcher's meat, the strata almost bleeding. The red and angry torrent of Price River, a mountain brook of liquid mud near which we lay, was quite in keeping with the scene. How staid and settled

of the great range would often count as mountains if not so mightily overshadowed.

Through the States of Montana, Idaho, Wyoming, Utah, Colorado, New Mexico, and Arizona, then on into Mexico, stretches the wide belt of the Rocky Mountains, not so much a single chain as a succession of parallel or converging ranges, known by different names, rising upon the elevated base that parts the waters of the Atlantic and the Pacific. In Colorado these ranges take the name of Park Mountains, as opening out to enclose great mountain valleys or plateaus called "parks", fenced to the east by a line of summits often over 14,000 feet, the most imposing of them Pike's Peak, which, when first known, was pronounced inaccessible, but has now a railway running to its top, and for a time had an observatory perched upon it, given up after experience of the intolerable rarity of the air. This bristling eastern face is the line of the Rocky Mountains proper, its ridges here more clearly ranked, while on the western side they straggle in greater disorder. The largest of the enclosed valleys is the San Luis Park in the south, over 100 miles long, at an elevation of more than 7000 feet, through which flows the Rio Grande to become the Mexican boundary. The most famous park is that of the Yellowstone, near the north end of the United States Rockies, whose ranges here fall lower and are more bunched up together, to rise again across the Canadian boundary.

This bare statement must be filled up with a hundred travellers' glowing accounts of magnificent scenery that has points like the "Garden of the Gods", the "Devil's

and old Nature looks in the Atlantic States, with her clear streams, her rounded hills, her forests, her lichen-covered rocks, her neutral tints, in contrast with large sections of the Rocky Mountain region. In the east the great god Erosion has almost done his work—the grading and shaping of the landscape has long since been finished, the seeding and planting are things of the remote past—but in this part of the west it is still the heat of the day with him; we surprise his forces with shovels and picks still in hand, as it were, and the spectacle is strange indeed and in many ways repellent. In places, the country looks as if all the railroad forces of the world had been turned loose to delve and rend and pile in some mad, insane carnival and debauch."—John Burroughs, *Far and Near*.

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Slide", the "Echo Cañon", the "Castle", and the "Pulpit Rock", made famous by pen and pencil, now that railways thread the mountains, at a height in one case of between 11,000 and 12,000 feet, through icy tunnels, under long wooden roofs to ward off the snow, and by such gorges as Mr. Kipling describes, "where the rocks were 2000 feet sheer, and where a rock-splintered river roared and howled 10 feet below a track which seemed to have been built on the simple principle of dropping miscellaneous dirt into the river and pinning a few rails a-top". He is not the only passenger who on these mountain lines has felt inclined to pray for the safety of the train amid natural spectacles that at every turn bring one's heart into one's mouth with alternate sensations of terror, beauty, and wonder.¹ The chief passes that naturally offered openings for the railways were the line of the southern "Santa Fé trail", the oldest line of exploration; the central Salt Lake route, by which went the great gold rush to California; and the northern "Oregon trail", by headwaters of the Missouri.

Beyond its western side, that huge central swell falls to the Great Basin, itself a mainly elevated region, divided into minor valleys

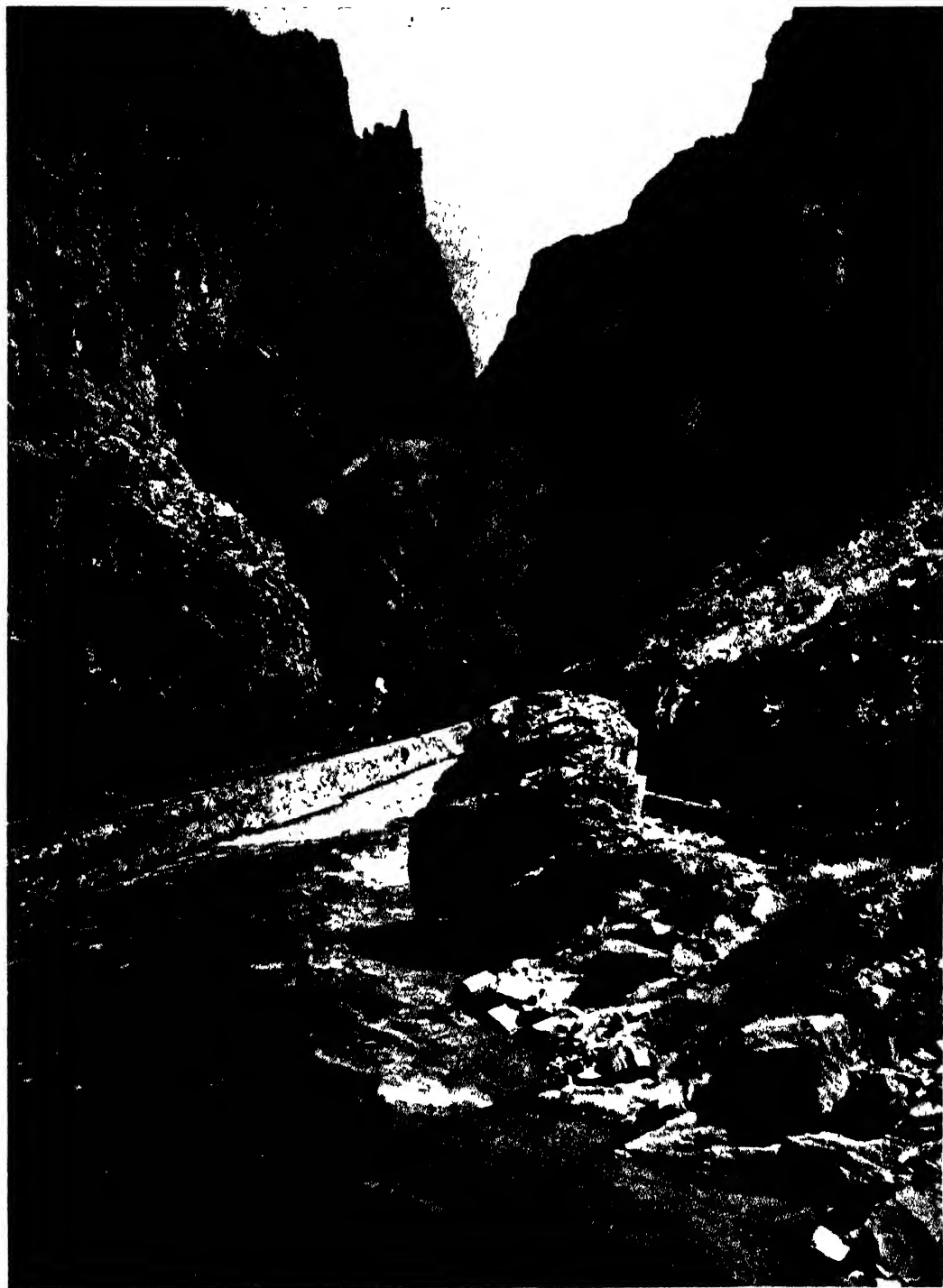
by ridges several thousand feet in height, yet at least one of its depressions sinks below the level of the sea. This is the most arid part of the country, most of it a dreary desert, breeding scorpions and tarantulas, where the naked soil is speckled with alkali, lying like half-melted snow, and the scanty streams can seldom saw their way through the mountains, but are sucked into the barren ground or gather into closed sheets and scums, the largest of them the Great Salt Lake, a shrunken, shallow dead sea, 2000 square miles in extent, at a height of over 4000 feet. Without any outlet, it receives the fresh water of Lake Utah, where stands that city that seems a freak of human credulity as amazing as any of nature's wonders; and about it the Mormons have marvellously made the desert to bloom by an industry equal to their ignorant fanaticism.

It is irrigation from the pure mountain streams, else rushing fruitlessly to the salt lakes, that has worked such a change in the heart of this barren region. There are natural oases in the Great Basin, all the fairer for the general dryness; but the riches of Nevada and other mountain desert States have as yet come rather from beneath the soil, and they were first populated by eager

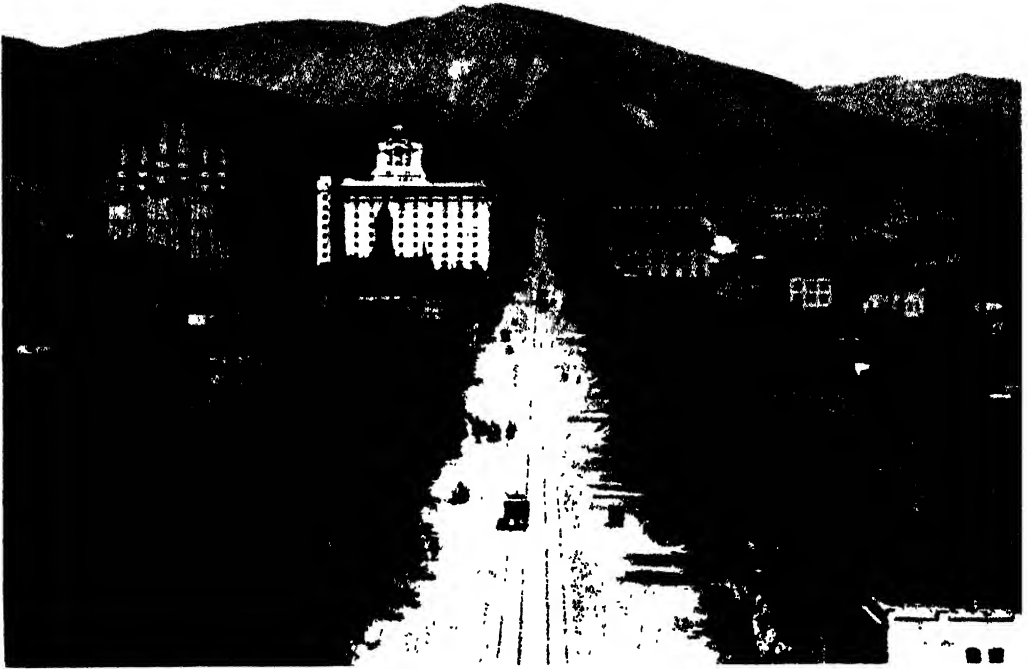
¹ Mrs. Bishop, to whom we are indebted for so many descriptions in all quarters of the world, thus describes a Rocky Mountain scene. "It was a single gigantic ridge which we had passed through, standing up knife-like, built up entirely of great brick-shaped masses of bright-red rock, some of them as large as the Royal Institution, Edinburgh, piled one on another by Titans. Pitch-pines grew out of their crevices, but there was not a vestige of soil. Beyond, wall beyond wall of similar construction, and range above range, rose into the blue sky. Fifteen miles more over great ridges, along passages dark with shadow and so narrow that we had to ride in the beds of the streams which had excavated them, round the bases of colossal pyramids of rock crested with pines, up into fair upland 'parks', scarlet in patches with the poison-oak parks so beautifully arranged by nature, that I momentarily expected to come upon some stately mansion; but that afternoon crested blue jays and chipmunks had them all to themselves. Here, in the early morning, deer, bighorn, and the stately elk came down to feed; and there, in the night, prowl and growl the Rocky Mountain lion, the grizzly bear, and the cowardly wolf. There were chasms of immense depth, dark with the indigo gloom of pines, and mountains with snow gleaming on their splintered crests, loveliness to bewilder and grandeur to awe, and still streams and shady pools, and cool depths of shadow; moun-

tains again, dense with pines, among which patches of aspen gleamed like gold; valleys where the yellow cottonwood mingled with the crimson oak; and so, on and on, through the lengthening shadows, till the trail, which in places had been hardly legible, became well defined, and we entered a long gulch with broad swellings of grass belted with pines."

On the other hand, R. L. Stevenson, who owns to being ill at the time, took from the train what seems a jaundiced view of the Rockies. "All Sunday and Monday we travelled through these sad mountains, or over the main ridge of the Rockies, which is a fair match to them for misery of aspect. Hour after hour it was the same unhomely and unkindly world about our onward path; tumbled boulders, cliffs that drearily imitate the shape of monuments and fortifications—how drearily, how tamely, none can tell who has not seen them; not a tree, not a patch of sward, not one shapely or commanding mountain form; sage-brush, eternal sage-brush; over all the same weariful and gloomy colouring, grays warming into brown, grays darkening towards black; and for sole sign of life, here and there a few fleeing antelopes; here and there, but at incredible intervals, a creek running in a cañon. The plains have a grandeur of their own; but here there is nothing but contorted smallness. Except for the air, which was light and stimulating, there was not one good circumstance in that God-torsaken land."



The Royal Gorge, Grand Cañon of the Arkansas, Colorado
The most remarkable chasm in the world through which a railroad passes.



An Oasis amid the Desert : Salt Lake City (South Temple Street), showing the Wasatch Mountains in the background

miners who thought as little of the scenery as of the dangers and rudeness of their pioneer life. Among these States, Wyoming is rich in coal as its neighbours in silver and gold; Montana has found new wealth in copper; while Utah, besides stock and agriculture, has almost every metal known—with some unknown to the rest of the world. Now that "Gentiles" press in to share the prosperity of its pioneers, the Mormon State seems bound to rise, though its "peculiar institution" has been cut down, which, indeed, made no part of the original doctrine, and was practised exceptionally even among the faithful.

A mere catalogue of the extraordinary features of the Great Basin would be a formidable task - its gloomy cañons, weird gorges, signs of volcanic convulsions, fantastic crests carved by wind and stony dust and broken into piles of gigantic rubbish, its fossil forests, its plains cursed by an alkali

scum, lava-deposits like a wilderness of petrified sponge or lifeless glaciers, seas of rock overhung by waves of cliff, hollows white with snowy gypsum, and many a stretch of bone-strewn desert, as that *Jornada del Muerta* over which the wayfarer must hasten without a halt if he would come alive to water and pasturage, or the mocking glories of the "Painted Desert, where the slopes glow topaz, the cliffs are ruby and amethyst, and the air is like thin white flame" till disturbed by sudden thunderstorms and cloud-bursts that may spangle the arid soil with patches of weirdly brilliant vegetation. The thickest gathering of such fearsome marvels seems to be on the rent and sunburnt *mesas* of Arizona, "the Marvellous Country" as Mr. Cozzens entitles it, "a mass of cañons, ravines, ridges, gullies, chasms, and mountains, piled one above another in inextricable confusion, in all conceivable shapes, towering above and

around you on all sides". In the far west also lie other geological monstrosities like the Lava Beds, whose labyrinthine recesses made a natural fortress for the Modoc Indians. Arizona and its neighbour, New Mexico, are the youngest States of the Union, having been in 1911 promoted from the rank of Territories.

To some of the mountains' most famous scenery we shall return presently. At present we hurry on through the Great Basin to pierce that farther wall of forest-mantled and snow-crowned crests that run through the Pacific States, Washington, Oregon, and California. The northern section, known as the Cascade Range, from the cascades of the Columbia River, has at its grandest points Mount Ranier and Mount Shasta, each well over 14,000 feet, besides the beautifully imposing form of Mount Hood, once taken for one of the highest points on the continent, and truncated volcanic cones now sealed by ice or by a crater lake like that of Mount Mazama, nearly 2000 feet deep. The southern range is the Sierra Nevada, where, among other snowy peaks, in which lie such wonders as those of the Yosemite Valley, Mount Whitney seems (excluding Alaska) the loftiest mountain of the States. The shore of the Pacific is again edged by lower coast ranges, separated from the Sierra Nevada by a rich valley as large as some European countries, where the Sacramento from the north and the San Joaquin from the south unite into a deep central inlet, guarded by San Francisco, western gate of the republic.

So much for that long railway run, on which, as a Western poet has it—

We glide by golden seas of grain,
We shoot, a shining comet, through
The mountain range, against the blue;
And then, below the walls of snow,
We blow the desert dust amain;
We brush the gay madrona tree;
We see the orange-groves below;
We rest beneath the oaks; and we
Have cleft a continent in twain!

The streams on this side, lying mainly outside the western ranges, and as a rule

running through very broken country, are more charming than considerable for the most part. Two great rivers gather on the west of the Rocky Mountains, to gain the Pacific through all obstacles. In the north, the Columbia ends in the States its erratic course which we traced through British Columbia. In the south the Colorado carries the snows of the mountains for 1200 miles to the Gulf of California, cutting its way through the barren table-lands of Arizona in an extraordinary series of cañons, then 400 miles from its mouth it becomes navigable for steamers. This Colorado, whose name, Spanish for "Red river", we shall again find on ground first colonized by Spain, must not be confounded with the shorter Colorado east of the Rockies. On that side, French names often remind us how the pioneers were Canadian explorers or hunters; but west of the mountains, such words as *cañon*, *mesa*, *bonanza*, commemorate the men of Spanish blood, who eighty years ago were masters of this region, but have become rather servants since their pushing rivals came in search of its gold, then settled down to cover its valleys with crops and orchards of fruit, ripened by the genial climate of the western coast, though often irrigation has to be called into play, where else all colour would be burned from the summer landscape.

Here we find a motley of uncongenial stocks. Instead of houses without history and without architecture, we now come here and there on time-weathered structures with such features as flat roofs, domed turrets, and arcaded galleries, their low walls wreathed with gay creepers, set among hedges of fuchsias and groves of tufted palms or colossal yuccas, upon pastures blooming the greener against a frequent background of snowy sierras, beyond which lie the stony deserts of Arizona and Nevada. Old-world *Missions*, their bells no longer tinkling in quiet solitude, adobe mansions of former lords of the soil, and moribund "greaser" towns are neighboured by stirring American cities, as by some that may be half Mongol and half "Dago" in their population; and plains which were once

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open cattle-ranges bear leagues of wheat, beans, beetroot, miles of apple and orange groves, acres of plums, peaches, apricots, hops, among the mighty woods and the glorious flowers carpeting the mountain-sides, from our own wild roses and violets to the Golden Poppy, that is the emblem of California. Fruit is its most famous product, where may be seen one vine 10 feet in the diameter of a stem that yields as many tons of grapes in a good season; but much of its broken surface is also given up to more prosaic farming, prospering multifariously upon mountains and valleys. Its notable wine production seems bound to suffer from the new temperance legislation; but California had added another string to her bow by the importation of Italian mulberries for silk culture. It is the southern part that specially enjoys a benign climate, with sunshine as the rule and torrents of almost tropical rain as an often welcome visitation. Off this stretch of the coast lie rocky islands, the tops of submerged mountains, whose

submarine gardens of huge seaweeds make aquariums for brilliantly-tinted fish and goals of excursion trips from the mainland.

San Francisco is the chief place on this coast, to which we shall return; but other cities are growing apace, whose names often tell of their Spanish origin. Sacramento, to the north-east of it, inland, ranks as the State capital. Monterey, on a bay to the south, was the capital of Spanish California, but now makes rather a choice bathing resort, as Santa Barbara farther down the coast has the note of an American Mentone. The chief city of Southern California, centre of the fruit-growing district, with an almost perfect climate all the year round, is Los Angeles, so cut down by impatient Saxons from its full title *Pueblo de la Reina de los Angeles*, "Town of the Angels' Queen", whose inhabitants boast themselves as having more automobiles and telephones per head than any citizens on the continent, besides hundreds of miles of electric railroads running out into the



Fruit-drying in Southern California

C. C. Pierce & Co.

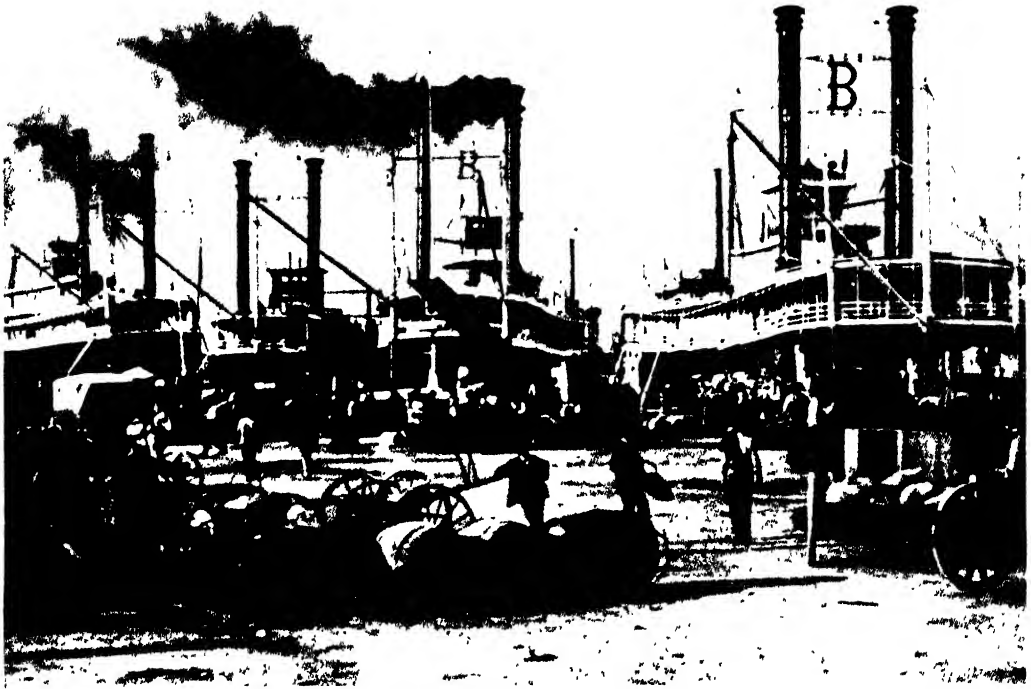
environing paradises they are fast cutting up into "town lots". A population growing on to half a million equals or surpasses that of San Francisco. The rising harbours of Wilmington and San Pedro are the city's outlets on the sea, a score or so miles distant; and if they find the weather too warm, its citizens can ascend 6000 feet by rail to the top of Mount Lowe, that overlooks their happy valley. At its southern edge, where this State meets the Mexican peninsula of Lower California, the sleepy Spanish port of San Diego is overshadowed by a new namesake that expects to thrive amain on the opening of the Panama Canal.

To the north of California, the young states of Oregon and Washington have prospered in the last generation through forests of grand timber on their western slopes, and other resources, as by the natural harbours of their coast-line. The Columbia, flowing out of Canada, makes a boundary between them, navigable through the Cascade Mountains for 500 miles from its mouth, where first rose Astoria, the fur-trading settlement celebrated by Washington Irving. The chief city of Oregon is Portland, that with more than 200,000 people has far outgrown its namesake on the eastern coast; but the State capital Salem has still to look modest beside that old Salem of Massachusetts.

In Washington, called the "Chinook" State, from the wind that clears it of snow, the largest place is Seattle on a deep inlet of Puget Sound, with over 300,000 people, a port that has grown still faster than Portland on the temporary downfall of San Francisco after the disastrous earthquake of 1906. Tacoma, which thinks of itself as "the City of Destiny", is another harbour of this inland sea, at the head of which stands Olympia, the State capital. Here, on the borders of British Columbia and the shores of the Pacific, we have come only half-way through Uncle Sam's territory, for its dependency Alaska is spread out by the Aleutian Islands as far westward as the Atlantic lies to the east.

to north, taking as our clue the Mississippi, whose tributaries vein the central plain. This central waterway, first struck by a fur-trader in 1672, to be fully explored by La Salle, is the second river in the world, more than 4000 miles long, if its nominal tributary the Missouri, which has an independent course of nearly 3000 miles, were reckoned as the main stream; and both these rivers are navigable into the heart of the continent. The Mississippi - a corruption of the Indian *Misachibée* - keeps for 2000 miles an almost uniform breadth of 3000 feet, unless where it swells out into lake-like openings. It has the peculiarity of growing narrower and deeper as, by New Orleans, it approaches its outlet through an extraordinary delta of swamps, over which black currents trickle into shallow lagoons fenced off by sand-banks, and the arms of the river often flow upon ridges of its own deposition called *bayous*, some feet above the level of the ground, entering the sea with the name of "passes" in the State of Louisiana - a name given in honour of La Salle's sovereign - which originally reached back to Canada. The main arms are embanked by artificial *levées*, as they were named by the French settlers of Louisiana, which have to be watched in flood as carefully as the dikes of Holland. From a steamboat on the river at New Orleans one looks down upon the roofs of the city, the more so as the craft used for passenger navigation are built with a pile of elevated decks.

A Mississippi voyage, the chief communication between north and south before railways, is not without excitement in the risk of running aground or colliding with floating drift; and the danger of fire or explosion was once notorious through the reckless racing between rival boats. But for hundreds of miles upwards one seems to be steaming on a huge turbid canal, behind whose monotonous willow-fringed banks the woody flats have been cleared for crops of maize and sugar-cane and groves of palmettoes, magnolias, and orange trees, beside which rise whitewashed negro villages and the tall chimneys of sugar-houses;



Busy Wharves on the Mississippi at New Orleans

Underwood & Underwood

then sometimes the prospect may extend far over a dreary marsh of tangled brakes of cane and dark woods of cypress, wreathed with Spanish moss. One of the most striking features of southern scenery is the way in which trees are hung with the drooping wreaths called "Spanish moss", investing them, as G. A. Sala says, with strange phantasmagoric forms -- "trees that are dragonish; trees that are like bears and lions; trees like great vultures with outspread wings; trees like the three witches in *Macbeth*, grown to colossal stature and commanded to stay there, in the midst of the Louisianian wilderness, with their skinny arms outspread and their mossy rags fluttering in the chill morning air, to breathe strange curses and prophesy horrible things for ever". It would be wrong, however, to set Louisiana down as all swamp and jungle, for out of sight of the river it has healthy prairies, uplands, and pine-wooded

hills. The white people, of course, are largely the descendants of French and Spanish colonists, among whom the pushing Anglo-Saxon shows himself to the front in enterprise, without banishing the foreign jargon, that seems more at home than his own in this sunny clime.

A natural feature of the Mississippi, after a time predominating over artificial banks, is the high bluffs that border its horse-shoe curves, above Louisiana's official capital, Baton Rouge, below which, for 200 miles, the waters have laid out their own flat basin. Sometimes these heights stand at some distance from the present course of the river, which has an unusual eagerness for shortening and straightening itself by cuts through this soft soil, and for shifting bodily sideways for a mile or two.

"These cut-offs have had curious effects: they have thrown several of the river towns into the rural districts, and built up sand-bars and

forests in front of them. The town of Delta used to be three miles below Vicksburg; a recent cut-off has radically changed the position, and Delta is *two miles above* Vicksburg. . . . A cut-off plays havoc with boundary lines and jurisdictions: for instance, a man is living in the State of Mississippi to-day, a cut-off occurs to-night, and to-morrow the man finds himself and his land over on the other side of the river, within the boundaries and subject to the laws of the State of Louisiana. Such a thing, happening in the upper river in the old times, could have transferred a slave from Missouri to Illinois, and made a free man of him."

So tells us Mark Twain, who, as a Mississippi pilot in his youth, is on this subject a serious authority; and he declares that nearly the whole thirteen hundred miles down which La Salle floated in the seventeenth century is now dry ground. The face of the country may be changed also by devastating floods, which have spread the bed of the Mississippi over a breadth of seventy miles; but it has been brought into better control since the U.S. Government took the charge of banking, lighting, and keeping clear this national waterway.

To the west of Louisiana lies the largest State, Texas, for a time a precariously independent republic set up against Mexico by adventurers whose names are commemorated in its cities - Austin, Houston, and so on - Falling from the Rocky Mountains, and from the precipitous escarpments of a singular table-land, 500 miles long, called the *Llano Estacado*, "Staked Plain", in the north-west corner, the "Lone Star State" has a Colorado of its own and other rivers on its hot slopes, besides the Rio Grande, that separates it from Mexico, and the Red River on its northern boundary, a tributary of the Mississippi. This huge State, twice as large as Britain, shows a natural variety of surface, rising from rich bottom woods and savannahs to rolling plains of grass, that wither into stony and sandy wildernesses, dotted with dwarf palm and leafless cactus stems and seamed by often dry river beds below a far-seen rim of mountains; but industry and irrigation are transforming the desert, here as else-

where, into fertile fields and pastures, while, as in Louisiana, rice can be grown on the moist lowlands. The coast rim is cut up by sandy lagoons, the chief port being Galveston, which in our time was visited by a terrible storm and inundation, destroying thousands of the inhabitants. Galveston rivals New Orleans as an exporter of cotton, a main product of the Texan lowlands, while the higher plains are Uncle Sam's greatest cattle-breeding region. A single ranche here, now broken up, was larger than some of the small States, bearing myriads of cattle, watered by hundreds of windmill-worked wells. Lately Texas found what seemed an inexhaustible addition to its wealth in gushing wells of petroleum, bidding fair to rival those of Baku; but when hundreds of companies had been formed to exploit this supply, and the accompanying flow of speculation, some of the strongest "gushers" suddenly stopped, apparently in mysterious connection with a volcanic disturbance of Central America.

On the east side, Louisiana is in part separated by the Mississippi from the State of Mississippi, with its rich and swampy lands edged by a sandy sea-front, on which, there is no good port, the great river being for practical purposes the coast of this State; but, not far beyond its eastern bounds, Mobile Bay in Alabama offers a considerable harbour. On the Mississippi its chief town is Vicksburg, so much heard of in the Civil War; and Natchez preserves the Frenchified name of a remarkable sun-worshipping Indian tribe visited by La Salle. Like Louisiana, Mississippi has great stretches of virgin forest that become more valuable now that timber begins to run short in the north.

Higher up on this side Memphis marks the corner where Tennessee touches the Mississippi. On the western side, facing a great part of Mississippi and of Tennessee, lies Arkansas (pronounced *Arkansaw*), originally French territory, sloping down from the Ozark Hills, its forests, prairies, and swamps traversed by the Arkansas River, over 2000 miles long. Farther to the west, this river passes through the Indian

Territory, an area nearly as large as Ireland, given as reservation for the warlike Indian tribes of the south removed from their native hunting-grounds three-quarters of a century ago, here to be penned up out of the way of mischief. They are now closed in by settled States, gradually restricting bounds at first twice as extensive; and their lands are intruded upon by white men, who, through marriage with squaws, have often made themselves the leading members of the various communities, living by industry under regulations of their own. Not a few negroes also have become citizens of these mongrel republics, that usually keep themselves in the background, out of the way of the railways, the towns on which are mainly populated by whites. Thus the intention to leave the red man to himself has been frustrated, while he has so far risen in civilization as to be no longer the dangerous neighbour he was to the first settlers. As soon as he ceased to be dangerous, indeed, his rights were not much regarded. The Territory of Oklahoma was sliced away from his once remote refuge; and this annexation has since been admitted to the Union as a State.

To the north of what was the Indian territory, the rolling plains of Kansas have attracted many British settlers and other immigrants to this central State, grown into prosperity in half a century. On its western side it rises into the drier and poorer slope of the mountain region; and through it flow the Arkansas, and the Kansas River, a tributary of the Missouri that gives its name to the eastern neighbour State. The Mississippi separates Missouri from a narrow end of Kentucky, where comes in the Ohio at Cairo, its site said to have been in Dickens's eye for the Eden of his *Martin Chuzzlewit*. Up the Ohio lie Louisville, "the Falls City", in Kentucky, and Cincinnati, on the border of Ohio, both counting their citizens by hundreds of thousands. Ohio's capital is the central Columbus, a city of over 200,000, but far outgrown by Cleveland, on its Lake Erie northern edge. Among the Ohio's tributaries are the Miami and the Wabash, that made roads for early traders

and missionaries coming south from the Lake posts; and to its southern side flow the Tennessee, Cumberland, and Kentucky Rivers. The Mississippi, shut between walls of forest, and often edged by the bluffs that are its characteristic feature, is still liable to overflowing, and has to be hemmed in by artificial banks at many points. Above Cairo the "Upper River" runs for over 1000 miles through the firmer soil of a wide alluvial basin, enclosed by heights. On the left bank lies Indiana, on the right Missouri, with its capital St. Louis, near which comes the confluence of the Missouri, the "Big Muddy" of unsentimental trappers, that is really the chief stream, navigable for 2500 miles above the confluence, with its affluents watering half a dozen States organized in our own time.

The Mississippi, however, keeps its pre-eminent name as having been first known as a highway between the northern and southern colonies of France. Beautifully winding among bold crags, lofty bluffs, and tangled islands, among the homes of a more energetic people than line its southern stretches, between growing cities, and bordered by the railways that have drawn away so much of its floating traffic, with Iowa on its right and Wisconsin on its left bank, it leads us up into Minnesota, still navigable but for a series of rapids and cascades, famous among them the tributary Minnehaha Falls, "Laughing Water" of Longfellow, and the St. Anthony Falls, now tamed by bridges and mills near the "twin cities" St. Paul and Minneapolis, homes of over half a million people. Here is the head of the steamboat voyage from New Orleans, a single interruption in Illinois being turned by a canal. Above this, the devious course of the river is among the ten thousand lakes of Minnesota, and it has its cradle in Lake Itasca, towards that eastern border of Dakota formed by the Red River of the North, whose waters run into Canada through the richest wheat valley of the world. To the east, the Mississippi's bending course comes not far from the St. Louis, that, flowing into the head of Lake Superior, may be called the source of the St. Lawrence.

To the west, the many streams of the Dakotas are gathered up by the Missouri, turning south after an eastward course through Montana, past the ten miles of rapids that give a name to the young city of Great Falls, and from its "Three Forks" which meet below the Rocky Mountains.

The three great waterways of North

most thriving cities. At the head of Lake Superior "the Zenith City", Duluth, christened from an outlaw who here played Robin Hood in French fur-trading days, was a name hardly known little more than a generation back, but now, as outlet of a district rich both in crops and minerals, is terminus of a dozen railways and has a popu-



Types of American Grain Elevators: the port of Buffalo, on Lake Erie

The United States is the principal grain-exporting nation in the world, having more grain elevators than the remainder of North and South America, Asia, and Africa put together

America thus all take their rise, close together, in this northern corner of the Central States. We have already visited the mighty lakes of the St. Lawrence from their Canadian side, and seen how their southern shores are edged by the States of Wisconsin, Michigan, Ohio, Pennsylvania, and New York. Uncle Sam has taken full advantage of the navigation of those inland seas, its natural obstacles turned by canals and locks; and on or about the lakes stand some of his

lation growing on to 100,000. At the foot of Lake Michigan, that runs like a back-water southwards between Michigan and Wisconsin, stands in Illinois the Republic's second largest city, Chicago. On the Wisconsin side Milwaukee, called the "Cream City" from the colour of its bricks, claims to have the largest clock in the world, as also the largest brewery, slaking with lager beer the thirst of a half-German population of over 400,000. Lake Huron has no famous

city to grace its American bank except Detroit, noted for manufacture of motor-cars, its half-million of people overflowing into Canada, across the minor Lake St. Clair, by which it connects with Lake Erie.

On Lake Erie, at the mouth of the Cuyahoga, rises the tree-spangled "Forest City" Cleveland, whose sumptuous Euclid Avenue and Prospect Street quarter is joined to West Cleveland by a mighty viaduct spanning a valley crowded with iron-working, petroleum-refining, and pork-packing industries that in a generation have more than doubled the population to over 600,000. At the foot of the lake its rival Buffalo, having as yet not quite half a million inhabitants, calls itself the "City of Light", and by no means hides its light under a bushel, for, with such a store of electric energy at hand as Niagara, it cherishes a hope to grow into the biggest city of the world, as it already boasts the biggest office building, the biggest coal-trestle, the biggest market for grain, lumber, horses and sheep, and to be the centre of the biggest population, nearly forty millions, that can be counted within the radius of any city's dealings. Other cities must have something to say to such a pretension, but Buffalo seems bound to grow apace, for all along the hour's tram ride to Niagara may be seen how many mills and works are being set up beside this mighty supply of water-power. Rochester is another large city of New York State, which extends along the south shore of Lake Ontario, its soil seamed by trough-like lakes about which stood the fortified towns of the fierce Iroquois, and the thick backwoods that gave a setting for Cooper's Red Indian romances. On New York's east side, beyond the tamed wilderness of the Adirondac Mountains and the lovely stretches of Lake Champlain and Lake George, we come back into New England.

It seems best to treat America's greatest cities apart; so here let us turn to look at some natural marvels of this huge country. Among these, Niagara Falls long ranked as the most famous, and still stands highest by the advantage of accessibility, a sight which no tourist need omit. Till our own

time it poured to waste a hundred million tons of water an hour, the principal fall representing an amount of power to generate which it would take nearly three times as many tons of coal. Now science has captured a share of this abundant energy to work the industries of cities a hundred miles away, a range that may soon be extended; while both Governments concerned take measures not to spoil the stupendous spectacle by too intrusive signs of subjection to man's ingenuity.

Niagara has been already dealt with in our survey of Canada, where it was shown how this no longer can pose as the world's greatest wonder in its kind. Taking it as the standard for the United States, such a good judge as Mr. John Burroughs pronounces their second cataract to be the Shoshone Falls in Idaho, where the Snake River, nearly 1000 feet wide, after preliminary leaps isolated among towers of rock, gathers to pour its whole volume over a precipice of more than 200 feet from one abyss into another in a deep volcanic cañon, that, a few miles below, is again stirred by underground streams spouting from its dark sides into the main current. This writer also distinguishes as surpassingly beautiful, the Multnomah Falls on the south bank of the Columbia, "not water, but the spirit of water, of a snow-born mountain torrent, playing and dallying there with wind and gravity on the face of a vertical moss-covered rock wall six hundred feet high". The Spokane Falls on the border of Washington State, as high as Niagara, are remarkable for being within the city of Spokane, which thus includes an exhaustless source of energy.

All these are in the far western States, as yet somewhat out of the ordinary tourist's ken. Here the most renowned display of nature's water-power is in the Yosemite Valley, "that semi-tropical Switzerland" of the Sierra Nevada, now so well known as within reach of San Francisco, and preserved in its wild beauty as one of those grand-scale "Parks" kept in charge of the nation. This gigantic gulf of land, shut in by domes, spires, and vertical cliffs,



Underwood & Underwood

Looking across the Yosemite Valley to the Great Yosemite Fall

From Glacier Point, on the left, it is a sheer drop of nearly a mile to the bottom of the valley. It calls for steady nerves to stand on that dizzy eminence, calmly gazing over the landscape.

makes a mile-deep basin for the Merced River and its tributaries, leaping down into it by cascades, several of which would be famous if not thrown into comparative insignificance beside such sights as the great Yosemite Fall, that takes a clear leap of 1500 feet-- apparently the longest in the

world--and the "Bridal Veil", only half as high, but more beautifully dissolving into spray. To write a guide-book to the Yosemite, with its bewildering wealth of water, crag, and forest scenery, must try any author's stock of epithets. Where nature has worked on such a vast scale, she planted

woods of her hugest trees, the Sequoia cedars, so called after the gifted Indian inventor of a Cherokee alphabet, and rather impertinently renamed Wellingtonia on this side of the Atlantic. One fallen giant is a tunnel of decay, through which a man can walk without stooping his head; on the trunk of another a carriage can be driven as along a road; and thirty couples have danced on the stump of a tree that took three weeks to fell by the labour of five men. There is one that must have stood 450 feet high, which appears to beat any accurately measured in Australia, so the Americans may cherish their "Mammoth trees" as the largest in the world. Little inferior are the great redwood trees, rising in these forests 300 feet high, where the Australian Eucalyptus has been naturalized among gnarled cypresses, spreading live-oaks, and other native giants. In the same region, the Hetch-Hetchy valley, not so famous, presents the same features as the Yosemite on a smaller scale.

It is in the newly-opened West that such marvels are at their height. Not till the middle of the nineteenth century was the Yosemite Valley hit upon by soldiers in chase of Indians; then only in 1870 came to be authentically discovered another wonderland almost at once set apart as the "Yellowstone National Park". A wandering trapper who brought news of the place "where hell bubbles up" was treated as a liar; and a strayed member of the first exploring expedition had been almost starved to death amid a magnificent wild, in our day traversed by excursion coaches, and policed by soldiers, who act as gamekeepers for the rare bisons and beavers preserved here, with bears, elk,

and other animals ranging a free "Zoo", 60 miles long by over 50 miles broad, in the north-west corner of Wyoming. This elevated basin of the Yellowstone, a tributary of the Missouri, seems one great crater, bristling with volcanic vents, through which fountains of hot water have been gurgling for centuries, and staining with nature's bright hues the soft brown or yellow rock that named the whole region. The geysers here give the truly American satisfaction of being the greatest in the world, beside which those of Iceland and New Zealand may hide their diminished heads, as they seem to do in our time.¹ Well might the red men have held aloof in awe from such a fearsome hold of nature, now beset by tourists, who see only the decadence of a once far more stupendous activity.

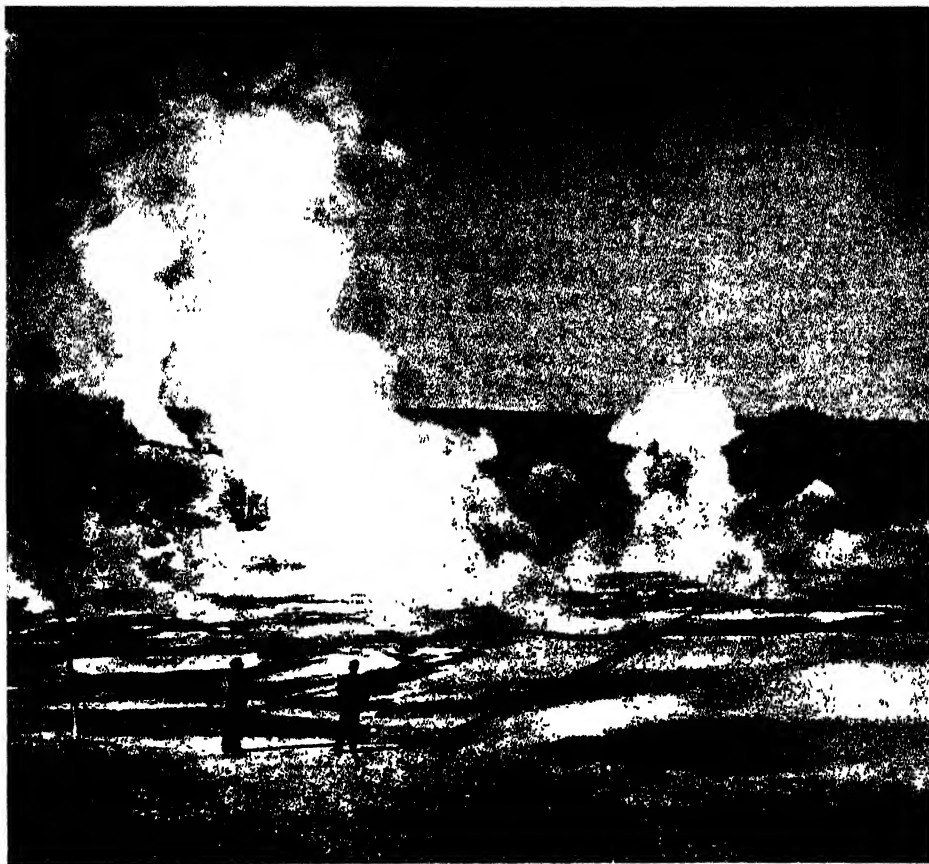
It takes a week to go round all the wonders. Three railway lines bring increasing thousands of sightseers every summer within reach of the valley, through which they are conveyed by slower vehicles, rails being banished as incongruous; and some of them spend weeks in a health resort 7000 to 8000 feet above the sea. They are allowed to fish, but not to shoot, guns being taken away or sealed up by the soldiers on guard at each entrance. The camera is the weapon most freely used. Visitors find quarters in tents, in public camps provided by an enterprising agency, and in steam-heated, electric-lighted hotels, like those that soon sprang up at such points as the "Mammoth Hot Springs", the head-quarters of the whole tourist-ground. These are the largest display of innumerable springs and pools of mineralized hot water, encrusting their terraced falls or the basins of extinct geysers with

¹ There are three groups of fountains, the chief ones christened with fitting or fanciful names: "Old Faithful", which under observation has lately altered the periodicity of its punctual spouts, 100 feet high; the "Giant", that at uncertain intervals rises to 250 feet; the "Giantess", that shows herself only once a fortnight or so, but then may rage for a day or two, all the other geysers keeping still; the "Castle" and the "Grand", that also cannot be depended on for their appalling display; the "Black Growler" that is never at rest; the "Minute Man", that splutters out every fifty seconds; the "Excelsior"

slumbering for years, but awaking with an explosion like that of a mine, hurling rocks over acres around, and flooding the adjacent Firehole River. From time to time new geysers burst up, sometimes at the expense of old ones, which may account for different estimates of their relative energy by separate observers; their nicknames also seem not quite clearly fixed. The geysers are sensitive to soap, which, thrown down their orifices, may produce a premature discharge; but this tickling of nature's energies is, as in New Zealand, strictly forbidden.

the same tints and arabesques as in the wonderland of New Zealand. The rainbow cisterns, perhaps set in black sand, receive such names as "Emerald", "Sunset", "Morning Glory"; one it has been proposed to christen the "Kaleidoscope",

mena abound; mud fountains that seem to caricature their majestic brethren; patches of Sodom and Gomorrah; "paint-pots", and "porridge-pots", and caldrons of hell broth. Rocks take the glow of autumn forests, where other cliffs of black obsidian



Underwood & Underwood

"Where hell bubbles up": geysers in the Yellowstone National Park—"Black Growler" at the left, "Constant" at the right

as showing sixteen different tints—"orange, burnt-orange, olive-brown, olive-green, Nile-green, apple-green, emerald, cream, yellow-grey, indigo, glacier-blue, blue-black, clear-white, grey-white, brick-red, and golden ripples from the sunlight". Ice-cold and hot waters are so closely mingled here, that men can catch a trout in one stream and cook it in another without budging a foot. Manifold volcanic pheno-

sparkle like jet, and white stalactites imitate the envining snow-capped summits of this heart of the continent. And the power of water in shaping and tinting the scenery is not less manifest than that of subterranean fire. From its lofty lake the Yellowstone River breaks through the valley in a series of cañons and falls which no words can describe. Mr. Rudyard Kipling, after trying to paint "the welter of colour" on

the sides of the great gorge, 8 miles long and 1700 feet deep, gives up with the remark that any picture of it would be rejected by the Academy as a chromo-lithograph.

The most peculiar feature of western scenery is these cañons, open tunnels as it were, where the mountain torrents have sunk a way through friable rock, forming deep gorges, edged by thunder-splintered and weather-worn rocks carved into a thousand delusive shapes. The high tablelands beside the Rocky Mountains are scored with such cuttings, often run dry, or still banking impetuous streams, in sight of which a man might die of thirst, so steep are the confining walls. The most stupendous is the Grand Cañon of the Colorado, which early Spanish explorers reported to be three leagues deep; but more accurate measurements bring this down to about a mile, at which depth the river flows for more than 200 miles, buried between abrupt, wonderfully coloured and marbled walls, edged by weirdly-shaped towers and rugged battlements, forming the longest and deepest cleft on the globe's surface. Major Powell, who first measured its course in modern times, gives us moving pictures of this way through the bowels of earth; and what must have been the sensations of an ignorant trapper, who, escaping from Indians, is said to have floated on a raft down its gorges and rapids, at length reaching a Mormon settlement with a tale taken for a madman's dream! The Arkansas, on the eastern side of the Rockies, has another Grand Cañon, at one point sunk under crags bristling to the height of any English mountain.

In the thirsty lands of the west, there are several lost or disappearing rivers, that vanish underground like the streams of the Karst formation in Europe, or, on a smaller scale, our Derbyshire "swallows" and the "woe waters" that periodically burst out of their chalk reservoirs near London. The Deschutes River of Oregon is filled always with the same volume of current by tributaries vanishing to be filtered through spongy lava-beds, from which they burst forth out of dark caverns

and cañons into a main stream so sparkling and clear that it makes one of the best trout rivers in America. Other streams are wholly swallowed in beds of sand or gravel, sometimes to reappear miles away.

The Mammoth Cave of Kentucky is a lion that has been longer before the world, and now hears echoes of rivalry from other regions. This is a series of subterranean hollows in the limestone which have been explored for over a dozen miles, but hardly known are some of their multifold recesses. In the ponds and streams here gathered in darkness live fish adapted to their environment by having no eyes; and the cave harbours blind rats, beetles, grasshoppers, &c. Eyes or no eyes, a stranger wandering without guidance would soon be lost in these labyrinths. They are said to have lodged consumptive patients, who found relief by living in the equable temperature underground. This cave is more remarkable for its great size than for its display of stalactite and stalagmite formation. Many others occur in the limestone of Kentucky, Tennessee, and Indiana. In the Rocky Mountain region are caves that seem not less wonderful, if not more so, among them the many-branched Wind Cave, near the Hot Springs of South Dakota; and another in Montana, which appears to contain a considerable river, making a fall of 100 feet in the darkness. At Luray, in Virginia, one can walk a mile or two through a series of underground galleries, not yet fully explored, where nature's sculpture is tinted pink, blue, or amber, or inlaid with a grain as of fine wood; in one "Cathedral" cave the stalactites give out a chime like musical-glasses; one rose-coloured column of stalagmite is six men's height; and from one roof hangs a stalactite for which is claimed the truly American quality of being the largest in the world.

So much on the most famous sights of America; but of course one might fill a volume with accounts of the manifold wonders, terrors, and freaks of nature, which often allow Uncle Sam to boast how his large estate includes features that are unsurpassed in their kind. Yet none of these appears



Among the "Buttes", Grand Cañon of the Colorado

Underwood & Underwood

This view is taken within the Cañon, whose highest point is almost half a mile vertically above and behind the spectator. The Colorado River is tearing along some three or four thousand feet below, at the bottom of the chasm in the middle distance. The Cañon is more than 200 miles long, and from 2 to 15 miles wide. At the point shown, it is 12 miles across to the farthest rim.

more wonderful than the energy with which the country has been overrun and subdued to the needs of man, so quickly that the Far West of our boyhood is now the centre of the United States. And, as

far west from the Rocky Mountains as these are from New York, the Republic has outlying settlements and marvellous spectacles in Alaska, still so much of a dependency that it has been noticed apart.



The Capitol, Washington, D.C.

THE CITIES

We now turn from the natural marvels of America to the cities, whose growth has often been prodigious. Augustus, who found Rome brick and left it marble, seems outdone by the popular vigour that here, in less than a generation, changes a nascent town of frame houses and tin shanties into miles of stately brick and stone. The use of wood in building is common in the country and in small towns, but a certain stage in the growth of a city will be marked by the prohibition of this material, to lessen the danger of conflagrations, so rapidly destructive in such a dry climate, though well kept in check by a fire-service that has set copies to the Old World. For the many-storied piles of great cities steel is much used as a skeleton, fleshed with concrete, skinned over with masonry or plaster. The American cities are proverbially well supplied with all sorts of devices for saving time and labour—electricity, trams, elevators, and so forth. One thing that strikes a European is the apparently reckless way in which trains run along the streets, only slackening their pace a little as they glide through the rest of the traffic. "When

the bell rings, look out for the locomotive", is a legend familiar to citizens who, from childhood, must learn to look out for themselves, and for whom the rushing motorfiend with its "Gadarene grunt" makes no novel bogey. Another note of the streets is the small part private vehicles play among public ones in this democratic land. There are also observable frequent traces of carelessness or incompleteness. Beneath lordly buildings, the thoroughfares are often found badly paved, a fact that may relate to the dishonesty or inefficiency of municipal government. This is an admittedly weak point, where citizens have seemed often so busy with their own affairs as patiently to let themselves be robbed by gangs of knaves who in cunning and corruption seek titles to office. This evil of municipal life has been so crying, that many cities now find it well to hand over the management of their affairs to a small commission of trustworthy men, set above the tricks and temptations that beset minor politics, or to a paid official like the German Burgomasters.

The title of city is here lightly granted,

including such places as we should call boroughs. The larger ones, often adorned with handsome, or at least striking, buildings, are apt to produce a general effect of monotony in their long straight lines, and the piles of many stories that are pressed higher and higher to take full advantage of expensive sites. They make up in practicality what they may want in picturesque irregularity. "Streets", 80 feet or so in breadth, are usually crossed by "avenues" perhaps twice as wide, both often shaded by trees, and running out into straight country roads that extend the name of the spreading city for miles beyond its apparent boundaries. The rectangular arrangement lends itself to a simplicity of plan, on which modern streets are more often numbered than named, so that a stranger, set down in New York or Philadelphia, has little difficulty in finding his way to No. 666 in 199th Street, east or west, as it may be, of some central avenue. The name street is colloquially dropped as superfluous, there being no crescent or terrace to confuse nomenclature; one lives *on* No. so and so, or such and such an avenue. All blocks are equal in size, so that distances can be easily measured. It is often said that to see one American city is to see all; one writer even slyly suggests that they might be numbered, like the streets.

This is true of many, but not of the greatest, which at least in their older portions have a certain individuality. A few may be described, in fear of incurring the resentment of jealous rivals left unnoticed. For very marked are the jealousies between these citizen gatherings, each full of an ardent local patriotism grown as hastily as itself, and all the more remarkable beside the readiness with which an American moves his household goods from one city or state to another. The rivalry of Liverpool and Manchester pales before that of brand-new western competitors, each expecting to become another Chicago or St. Louis, when it has hardly a native-born inhabitant. Such a feeling is said to be strongest between near neighbours; at St. Paul and Minneapolis, for instance,

separated from each other's bustle by the Mississippi, as Tarascon and Beaucaire by the Rhone. Another point is the by-names or nicknames bestowed on cities; and the character given to their different communities by sayings like that which makes money the touchstone of social success in New York, but brains in Boston, and birth in Philadelphia, all which qualifications must be taken as salted with a grain of neighbourly satire, and losing themselves through closer intercourse. One might also discourse of the names of the cities—some of them well inherited from old Indian landmarks; some testifying to the first settlers' love of their old country homes; some commemorating great and small patriots; some reflecting the youthful republicanism that adopted such titles as Athens and Rome in very incongruous circumstances; some betraying an epoch of bad taste, which complacently formed hybrids like Mugginsville or Indianapolis; and some suggesting nothing but that the builders must have been at their wits' end for a name. The names of the States, more often of native origin, are commonly euphonious and dignified. It will be observed that this account does not dwell much on the capitals of the separate states, which have often remained comparatively obscure, outgrown by more fortunate localities, as Lanark and Renfrew by Glasgow, or Lancaster by Liverpool.

The capital of the United States is an artificial one, set apart from all inter-state jealousies. Within Maryland, 10 square miles have been fenced off as the Federal District of Columbia, whose inhabitants, alone among American citizens, are disfranchised, and have no voice even in their own municipal government, said as it is to be more efficient and economical than that of any other American city. For such a state of most un-American subjection they have to console themselves by the privilege of living at the heart of affairs, and on the host of legislators, officials, and office-seekers congregated in this neutral area. Washington has a dignity of plan well answering to its functions and to its by-name "city of magnificent distances".

The World of To-day

From what was intended as its central point, the stately Capitol's white dome crowned by the Goddess of Liberty, radiate four chief thoroughfares, crossed by streets numbered or lettered, and by avenues named after the States of the Union, all unusually wide and finely shaded with double rows of trees, broken up also by parks and gardens, the whole laid out upon a plan that puts to shame the trimmest *Residenz* of Europe, though the city has shown a truly American independence in growing out on one side rather than the other. Lady Theodora Guest judged its charms inferior only to those of Venice and Stockholm; more critical admirers point out how there is as yet about it a want of finish that perhaps represents the rapid national development.

Far from the most imposing of many public buildings is the White House, palace of the bourgeois sovereignty to which every born American may aspire. The first and greatest of presidents, George Washington,

is commemorated by the tallest obelisk in the world, 555 feet, the top of which makes a prospect-point over the city. Another monument of him is his home, Mount Vernon, to which an hour or two's railway journey takes reverent pilgrims; while Arlington, the seat of his wife's family, on the Virginia bank opposite the city, has been consecrated by regiments of tombs for soldiers killed in the Secession War. At certain times the White House is open to visitors of every class, who by thousands a day may enjoy the satisfaction of shaking hands with their Chief Magistrate. More exclusive functions and festivities make this a gay city during the session of Congress, when here is gathered the cream of American political life, along with the refined social element supplied by foreign Legations. Hotels for a frequent concourse of visitors on political business are matters of course; and among many churches of all sorts an Anglican cathedral is being built from



Washington, D.C.: the White House, north front



Washington, D.C.: a square in the heart of the official quarter, showing Government buildings

plans of our late ecclesiastical architect, G. Bodley, R.A. Washington's claims to supremacy do not depend on mere size and numbers. The population is about 330,000, whereas Baltimore, the chief city of Maryland (itself not the State capital, which is Annapolis), has 560,000.¹ And Washington may not always remain unquestioned as the national capital; for since the republic has so widely shifted its centre of gravity, there are cities of the Mississippi valley which begin to think they might fill that part with more general acceptance. Meanwhile it sets a model for what, according to Henry James, an American city ought to become.

"The 'artistic' Federal city already announced spreads itself, then, before us in plans elaborated even to the finer details, a city of

palaces and monuments and gardens, symmetries and circles and far radiations, with the big Potomac for water-power and water-effect and the recurrent Maryland spring, so prompt and so full-handed, for a perpetual benediction. This imagery has, above all, the value, for the considering mind, that it presents itself as under the widespread wings of the general Government, which fairly make it figure to the rapt vision as the object caught up in eagle claws and lifted into fields of air that even the high brows of the municipal boss fail to sweep. The widespread wings affect us, in the prospect, as great fans that, by their mere tremor, will blow the work at all steps and stages, clean and clear, disinfect it quite ideally of any germ of the job, and prepare thereby for the American voter, on the spot and in the pride of possession, quite a new kind of civic consciousness."

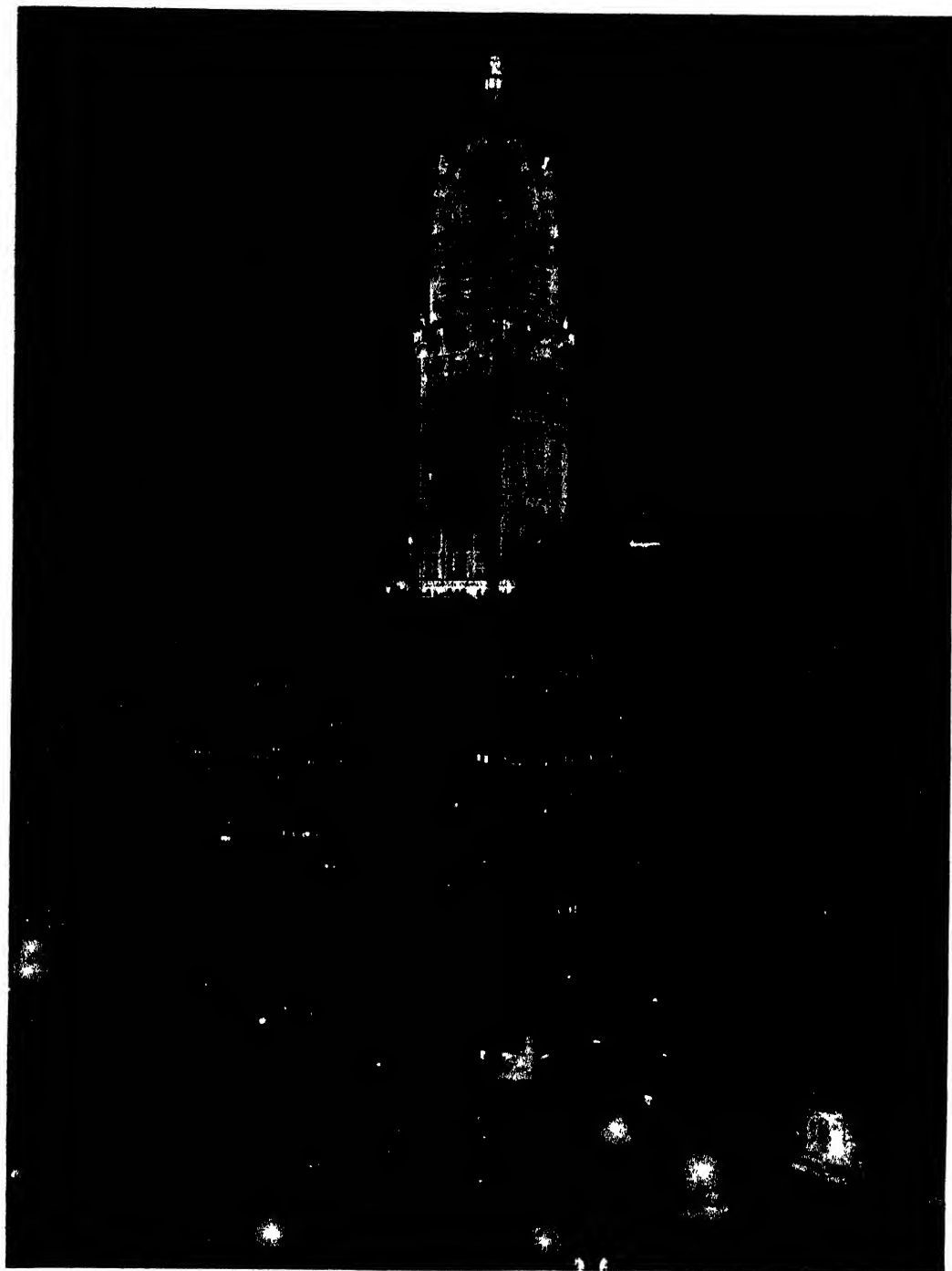
¹ These figures are from the census of 1910, here given in round numbers, but not, as a rule, allowing for the increase of a few years, in some cases considerable. As in the case of our own cities, also, the calculation is sometimes a little loose, in the inclusion or exclusion of suburban outskirts.

We all know how New York is by far the greatest city in the States, and their metropolis of business, where millionaires are counted at well over a thousand. Its

cosmopolitan population at present grows on over five millions, for whom newspapers are printed in a dozen languages; and the new Cathedral of St. John, now in construction, is fitly to have seven side chapels for services in Pentecostal tongues. About half the Jewish population of the country is here concentrated by hundreds of thousands; every fifth New Yorker appears to be a "Sheeny". New York is really three cities lying in two different States, separated from each other by water. On a long tongue of land between the mouth of the Hudson River and the East River arm of the harbour bay stands the main city, the Indian Manhattan, the Dutch New Amsterdam, that has spread a suburb of a million and a half people over to Brooklyn on Long Island, here joined to that central peninsula by the largest suspension bridge in the world. On the other side of the Hudson, Greater New York likewise takes in Jersey City in New Jersey by a tunnel of shops under the river, also its much Germanized neighbours Hoboken and Hudson City; and close at hand is the larger New Jersey manufacturing city of Newark, with the inventor Edison as most celebrated of its 350,000 citizens; then this is neighboured by Elizabeth City, the whole making a thick group of population, spread also upon Staten Island. Many of the close-packed citizens are fain to make their homes in more distant outskirts, connected by railways, steamboats, and huge ferries with the business quarter that keeps pushing dwellings farther out into the country. Thus a man may live under the laws of one State and carry on his business in another. Taking in all these outlying places, New York adds about a half to her census and begins to congratulate herself on being at least as large as Greater London.

The lower part of old New York, about the harbour and its Battery, still shows some cramped irregularity; but higher up the city is all rectangular lines, like its Broadway of shops and its Fifth Avenue of palatial mansions. This symmetry does not extend to the constructions, that

display all sorts of designs in their audacious elevation as the modern towers of Babel, nicknamed "skyscrapers", which, most closely packed in the business quarter of its lower end, where land costs hundreds of dollars a square foot, are the peculiar feature of New York, forced upon it by a cramped island site. Such erections, "the necessity of commerce, the despair of art", have been described by Maxim Gorky as a "maw of uneven teeth", and for their sake Henry James compares this city "that smells of millions" to a "hair-comb set on its back". One hardly knows which of those buildings, "grossly tall and grossly ugly", to name as the largest, so fast do they strive to out-top each other. The tower of one insurance office, 700 feet high, on a pile of 50 stories, used to rank as the most ambitious, but it was surpassed by the Woolworth building, 100 feet higher; and it is reported that a structure in hand will, from a height of over 900 feet, look down on all the world's spires, till overshadowed by a loftier design. Such lofty piles are veined by elevators, some stopping at each level, some running express past a score of landings. One gigantic hive of offices is said to house 1500 tenants. One block of what we call "flats" has 17 stories and nearly 3000 rooms, let in sets at rentals up to or over £1000 a year. Contrary to our rule, the highest rooms are the dearest, for their advantage of light and air. The huge hotels enclose each a little town of shops and offices; the most luxurious one has 1500 rooms and a staff of over 1600 persons. Prodigious are some of the stores and the restaurants famed as Epicurean temples. Many mansions are of really fine architecture; but the general stateliness is too much dashed by piles of mean tenements, and by signs of the municipal knavery that has long tyrannized over this city. It has its slum quarter in the "Bowery", once a Dutch farm, now close packed with squalor and misery, infested by alien crimes—the stabbing of Italians, the petty theft of Chinese, the drunkenness of Irishry, the greed of poor Jews, the plots of Polish



Underwood & Underwood

New York by Night: the illuminated tower of the colossal Woolworth Building

This huge structure, fifty-seven stories high, is the tallest building in the world. The massive Post-Office block—in the foreground, on the left—looks a pigmy beside it, and even the imposing newspaper buildings in its vicinity are overshadowed by this towering pile. Immediately in front of the Woolworth runs Broadway, the most important street in the city.

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or German anarchists; but it is seldomer born Americans that here give the police so much to do.

Crowded as it is, New York has made room for its Central Park, two and a half miles long, enclosing groves, lakes, and the great Croton reservoir, set in fine walks and drives; as also for other open spaces, amid the turmoil of the asphalted streets, packed with tramcars, motors, carriages, and other vehicles—hansom cabs being a new feature introduced from London—often spanned by the peculiar feature of the elevated railways, along which clanging, jarring and shrieking trains follow each other rapidly night and day, gliding as on a spider's web through the air above the labyrinths of traffic below; and the ground underneath also is now veined by tunnelled lines. No description can convey an idea of the bustle, the din, the press and push, the puffing and booming of this second city in the world, which hopes to be the first before long, and which, whatever it lacks, knows how to give itself bold advertisement.¹ "The roar of London" seemed to Dean Hole "a faint murmur compared with the thunder of New York; and Oxford Street and Regent Street and the Strand and Fleet Street as byways and country lanes in contrast with its main thorough-

fares". Farther up, indeed, lie quieter quarters, where the stranger, stumbling darkly on unpaved ways, may learn that he has wandered out to the parallel of 190th Street or thereabouts, crossed by the meridians of some dozen leagues-long avenues.

The Bay of New York is a safe and spacious harbour, shut in by the large Staten Island, and by the sand-bar of Coney Island, a very popular pleasure-resort and bathing-place; while upon smaller islets stand such public institutions as prisons and asylums; and others are fortified for the defence of the inlet, where night and day the stranger is welcomed to America by an electric torch topping a statue of Liberty, 150 feet high, a gift of France to this republic. Brooklyn itself forms a handsome and lively city, with points of picturesque adornment in its Prospect Park and Greenwood Cemetery.

A beautiful trip may be taken up the Hudson River, the American Rhine, its bold banks the site of many enviable mansions, and of West Point, the military college of the States. A day's steaming from the great city past the long rampart of "Palisade" cliffs and through the Catskill highlands, brings one to Albany, a quieter place of some 100,000 people, which was an important settlement, and remains the official

¹ "The very buildings cry out aloud of struggling almost savage, unregulated strength. No street is laid out as part of a system, no building as an architectural unit in a street. Nothing is given to beauty, everything centres in hard utility. It is the outward expression of the freest, fiercest individualism. The very houses are alive with the instinct of competition, and strain each one to overtop its neighbours. Seeing it, you can well understand the admiration of an American for something ordered and proportioned—for the Rue de Rivoli or Regent Street. Fine buildings, of course, New York has in every pure and crossbred style of architecture under the sun. Most are suggestions of the Italian Renaissance, as is the simple yet rich and stately Produce Exchange, built of terracotta and red-brick of a warmer, and yet less impudent, red than ours. In this lives the spirit of the best Florentine models. Fifth Avenue is lined with such fine buildings—here rococo, there a fine Gothic cathedral, then, again, a hint of Byzantine, or a dandy suggestion of Mauresque. . . . The city stretches north from Battery Point, between the East River and the Hudson, so that it is over thirteen miles long by about three wide. The best way to see it as a whole, therefore, is from some such point as the Brooklyn Bridge, whence I have seen it at night, stretched out in front

of a rosy sunset that bathed even New York in softness. From that point the low red houses sloping up from the waterside looked like a carpet for the giants to tread upon. These sky-scraping monsters stretch in a jagged backbone along the central northern line of the city—mere white frames for windows, most of them appear—square, hard outlines, four times as high as they are broad, with regular rows on rows of casements as close as the squares in a chessboard. And the whole city plastered and painted and papered with advertisements. I do not know that New York has much to teach us of the value of advertising, but the irregular building of the place, with acres of wall looking out everywhere over the whole city, affords a fertile field which has been sown and cultivated to the last inch. At the very entrance of the harbour you are hit in the face by what it would be discourtesy not to presume the largest advertisement in the world."—G. W. Stevens' *Land of the Dollar*.

Other visitors, like M. Jules Huret, are enthusiastic about the spectacle of those huge structures lighted up in the evening when twilight veils the outlines of the "Flat Iron" and its hideous neighbours, on which the stars seem to descend, shining thickly close to the earth.



Detroit Photo Co.

"Wayside", Concord (Massachusetts): the home of Nathaniel Hawthorne, the celebrated American novelist

capital of the "Empire State". Express trains whisk hard-worked New Yorkers to seaside havens of rest or excitement, like Atlantic City, which has been compared to Brighton, Blackpool, Ostend, and other European *villes de plaisance* rolled into one. Saratoga, at one time the gayest spa of America, is said to have gone out of fashion; and for a time millionaires most affected Newport, on the shores of Rhode Island, smallest, but not least thriving, of the New England States; but Newport seems to be now rivalled by the sumptuous paradises of Long Island, in closer touch with the telephones and "tickers" of Wall Street.

In marked contrast to New York, a few hours' journey distant stands Boston, "Hub of the Universe", capital of the Bay State, that was the brain of New England, and

can claim to have been the conscience of America. Many are the jests passed on Boston's claims to intellectual superiority: when a stranger approaching it asked about the chirping of grasshoppers, "a noise like the winding up of countless clocks and watches", that in hot weather overpowers the rattle of the train, the conductor is said to have gravely explained this as "the distant murmur of the Bostonians reciting Tennyson and Browning". But the undeniable truth is that most of the Americans whose names are best known out of America, Benjamin Franklin, Longfellow, Lowell, Holmes, Prescott, Bancroft, Channing, Emerson, Hawthorne—those that come uppermost in mind—have belonged to this New England district, which in the last half-century was as rich in noble ideas as in wit and wisdom, if now Boston seems to

have somewhat fallen from the dignity of an American Athens.¹ Such authors have made familiar to us the city of considerably more than half a million people, built on broken ground about a harbour formed by the mouth of the Charles and Mystic Rivers opening into a bay cut up by islands and promontories. In the older part there is a certain irregularity of winding streets, weather-worn houses, and moss-grown tombs. The more modern quarters have the trimmer American aspect; but the monstrosities of New York architecture are restricted by municipal ordinance, allowing no house here to be higher than 90 feet. The whole city is well equipped with parks and open spaces, among them Boston Common, which a Chicago critic found fault with as "so much vacant lot in the centre of the city", and Bunker's Hill, where British soldiery beat off the American patriots, yet a monument marks their pride in having made a good fight of it.

Of the suburbs, the most illustrious, through its Harvard University, the oldest American college with now 4000 students, is Cambridge, three or four miles off, itself a place of over 100,000 inhabitants, where "Washington's elm" is pointed out near the homes of Longfellow and Lowell; then within easy reach of Boston are towns of distinguished memories, Salem and Concord, that witness to the Puritan colonization of this State, while such names as

Gloucester and Worcester mark it as originally a New England. At Boston the tone has been more English than elsewhere in America; and here a Briton found himself in more congenial surroundings.

What Dickens most admired was the noble philanthropic institutions of Massachusetts, which might be considered the Scotland of the States, with Boston as its Edinburgh, and Lowell as its Paisley of over 100,000 people. Plymouth is its oldest town, as the refuge of the Pilgrim Fathers, before whose arrival this name seems to have been given to it by John Smith. Salem, the original settlement of the larger Puritan emigration ten years later, has had its comparatively ancient features famed by Nathaniel Hawthorne, as Springfield, with its arsenal, was sung by Longfellow. There are, by the way, some fifty Springfields on the map of the United States, perhaps all of them seeded from that Springfield, now an outskirt of Chelmsford, that is supposed to have sat to Goldsmith for his *Deserted Village*, a character not much borne out by those American namesakes.

Philadelphia, the Quaker City, is also named the "City of Homes", from the pleasing fact that its brick houses, instead of running up to the sky, are to a great extent occupied and often owned by single families, so that the population of more than a million and a half has been spread

¹ Boston's light is not put under a bushel by O. W. Holmes, who, through the mouth of one of the characters in his *Professor at the Breakfast Table*, makes this only half-humorous boast on its behalf: "A man can see further sir, from the top of Boston State-house, and see more that is worth seeing, than from all the Pyramids and turrets and steeples in all the places in the world! No smoke, sir; no fog, sir; and a clean sweep from the Outer Light and the sea, beyond it to the New Hampshire Mountains! . . . There was a great raft built about two thousand years ago—call it an ark rather—the world's great ark! big enough to hold all mankind, and made to be launched right out into the open waves of life—and here it has been lying, one end on the shore and one end bobbing up and down in the water, men fighting all the time as to who should be captain, and who should have the state-rooms, and throwing each other over the side because they could not agree about the points of the compass, but the great vessel never getting afloat with its freight of nations and their rulers—and now, sir, there is and has been for this long time a fleet of

'heretic' lighters sailing out of Boston Bay, and they have been saying, and they say now, and they mean to keep saying, 'Pump out your bilge-water, shovel over your loads of idle ballast, get out your old rotten cargo, and we will carry it into deep waters and sink it where it will never be seen again; so shall the ark of the world's hope float on the ocean, instead of sticking in the dock-mud where it is lying' It's a slow business this, of getting the ark launched. The Jordan wasn't deep enough, and the Tiber wasn't deep enough, and the Rhone wasn't deep enough, and the Thames wasn't deep enough—and perhaps the Charles isn't deep enough; but I don't feel sure of that, sir, and I love to hear the workmen knocking at the old blocks of tradition and making the ways smooth with the oil of the Good Samaritan. I don't know, sir—but I do think she stirs a little—I do believe she slides; and when I think of what a work that is for the dear old three-breasted mother of American liberty, I would not take all the glory of all the greatest cities in the world for my birthright in the soil of Little Boston."



Kau Art Studios

Philadelphia, "the Quaker City": Broad Street, with a glimpse of the City Hall

over a length of beyond 20 miles at the confluence of the Schuylkill and Delaware Rivers, opening out into Delaware Bay; and on either side of its main artery, "Chestnut", it has swallowed up several towns like Kensington, Richmond, and Southwark. Such names do not suggest that the nucleus was originally a Dutch and Swedish settlement; then in Charles II's time William Penn founded a city here, and made a friendly treaty with the Delaware Indians, who themselves had been reduced to Quaker principles against their will, forbidden the use of arms by their conquering neighbours the Iroquois. Thus this became the Quaker State, in later times much sought by German and other foreign emigrants, who have entrenched upon the original character that still marks much of the city with an air of broad-brimmed,

square-cut, roomy, and leisurely prosperity. For a few years, before the elevation of Washington, Philadelphia was the capital of the republic; and it has public buildings worthy of a capital in its Independence Hall, from which went forth that momentous "Declaration"; in the new City Hall, the Masons' Temple, the University of Pennsylvania, the Girard College,¹ and others,

¹ The history of this great educational charity is a warning to founders, pious or otherwise, how, in the New World as in the Old, they cannot depend on having their intentions carried out. The Girard endowment was the bequest of a Frenchman, brought up a Catholic and converted to deistic views. He directed the teaching of his school to be so strictly secular that no clergyman should even enter the gates. This condition was kept to the letter, but before a generation had passed, daily religious services were held in the college by *laymen*, taken in turns from all churches in the city, except those two extremes with which the founder had had connection by education and by sympathy!

adorning the straight, roomy streets that run on for so many miles into a patch of sky. The great feature of Philadelphia is the Fairmount Park, perhaps the finest playground of any city in the world. Almost as large as Windsor Park, this is simply a stretch of country left almost untouched on both sides of the Schuylkill, including wild ravines, patches of primeval forest, and the course of a romantic mountain stream, where, within what are now the bounds of a vast city, Tom Moore, whose cottage is still pointed out in one of the glens, probably wrote:

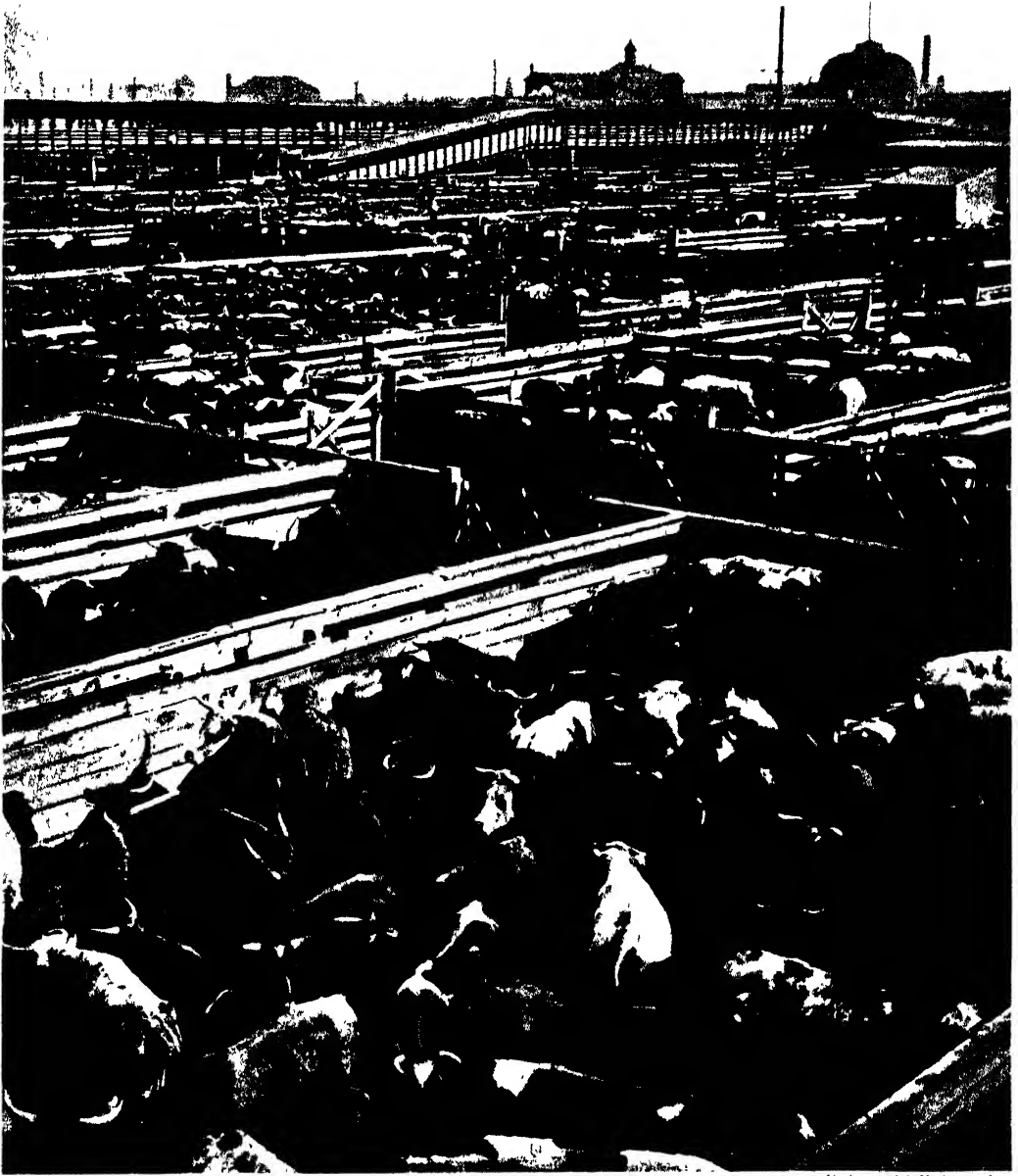
If there's peace to be found in the world,
A heart that is humble might hope for it herel

Here was held the great Centennial Exhibition of 1876, a survival of which is the Memorial Hall, maintained as a permanent collection of art and industries; and the park includes other public institutions and sights, among them the homely home of William Penn, reverently preserved. The city is a busy place of manufactures, the most notable of them carpets and locomotive engines. The "first families" of Philadelphia, like the "Knickerbocker" aristocracy of New York, are understood to cherish an unrepugnant respect for birth; but their sober pride and the solid respectability of Quaker life become much invaded by alien elements; as everywhere the gnarled stocks of Puritan earnestness, Quaker seriousness, Virginian "chivalry", and dry Yankee humour tend, in the friction of city life, to take on a smoothness under which the stranger detects little difference of grain.

Chicago, grown beyond 2,000,000 inhabitants, already looks forward to the day when it shall be second to no city in America, as it is now the first inland emporium, "a city where they are always rubbing the lamp, and fetching up the genii and contriving and achieving new impossibilities". Standing at the inmost point of the Lake navigation, half-way between the Rocky Mountains and the Atlantic, meeting-place of two dozen railways, this "hub of the continent" has thriven mightily as a distributing centre of

grain, timber, meat, tallow, and other commodities of the upper Mississippi basin, while it has gathered its population from all parts of the earth, so that it can be called "the most American of all American cities, and yet the most mongrel; the second American city of the globe, the fifth German city, the third Swedish, the second Polish, the first and only Babel of the age".

The present writer was there a few years after a restless cow, kicking over a lamp, had reduced most of the city to ashes, and made 150,000 people homeless; already in these few years it had sprung up again all the more stately for its downfall, and by this time it has grown sevenfold as a prodigy of enterprise, ingenuity, and success, in spite of the destructive fires repeated in its history. Chicago loudly admires herself, an admiration not shared by all strangers, who yet must wonder at her "mountains of buildings"—their highest peak the tower of the Auditorium, 270 feet—in long, straight ridges on a flat soil, so low that the site has had to be raised artificially; her environing of beautiful parks and her wildernesses of mean streets, from which crime often defies what has been a shamefully corrupt authority, and poverty scowls at the palaces and equipages of the Lake Shore Drive and the seven-mile Michigan Avenue, looking over the inland sea-front lively with gay yachts as well as vessels of business. The great city goes on always transforming herself with an eye to amenity; and an influential commission of citizens has been formed to see to her becoming the finest city of the world. Chicago shows larger blocks of building than New York; but their height is now limited to ten stories. She has some noble ornaments, like St. Gauden's great statue of Abraham Lincoln. She is not less proud of the "largest store in the world", a shop whose staff would make an army corps. She is now setting up the largest hotel, that will count its rooms by thousands. Again to quote G. W. Steeveys, this is "the queen and guttersnipe of cities, the cynosure and cesspool of the world. Not if I had a hundred tongues, everyone shouting a different language in a different key, could



Underwood & Underwood

The Great Union Stock-yards, Chicago

Chicago is the meat-packing centre of the world. Millions of cattle and hogs are received annually in the enormous stock-yards, of which 60 to 80 per cent are killed and sent out in various forms of prepared meats and by-products (e.g. lard, glue, soap, candles, &c.).

I do justice to her splendid chaos. The most beautiful and the most squalid, girdled with a twofold zone of parks and slums; where the keen air from lake and prairie is ever in the nostrils, and the stench of foul smoke is never out of the throat; the great port a thousand miles from the sea; the great mart which gathers up with one hand the corn and cattle of the west, and deals out with the other the merchandise of the east; widely and generously planned with streets of twenty miles where it is not safe to walk at night."

All these opposites go to an impression of enormousness highly satisfactory, it appears, to those who here made, or hope to make, enormous fortunes; while some visitors, like Mr. Rudyard Kipling, turn away with a frank disgust, which will hardly ruffle Chicago's complacency. She has fine buildings and temples of culture, like the quickly-grown university, and the museum that makes a relic of her colossal "World's Fair"; she begins to blush through smoke and dust for her nickname "Porkopolis", and her renown for an annual butchery of millions of cattle and pigs, which, according to a scarcely exaggerated story, go in to the factory alive to come out in a quarter of an hour as hams, sausages, lard, margarine, and binding for bibles! These animals are the lions of Chicago, whose most characteristic institution appears to be the shambles, into which cattle and pigs come in daily droves to be so artfully slaughtered, flayed, cut up, pickled, and packed by heartless machinery and men bathed in blood, work that seems noble beside the operations of firms whose pride is to skin and cut the throats of their rivals, and their most masterly stroke of business a "corner" by which every child's dinner is taxed to enrich the "kings", "barons", and "rings" of transatlantic commerce. The deafening tumult of its "Wheat pit", is another high note of this distributing centre. Not all the costly churches of Chicago can sweeten its struggle for luxurious existence, beneath which fester rancorous social sores that may yet poison such amazing prosperity

We need not be surprised to hear that a so fast-living population shows an alarming rate of insanity. But in Chicago's favour the late Max O'Rell and other lecturers declare that they have nowhere had more intelligent and appreciative audiences than from the inhabitants of what has been styled "a volcano of commerce and industry". Chicago comes second to New York as a centre of book publishing. It is also the seat of an enterprising sensational journalism which has brought its name into ill repute, whereas Mr. C. D. Warner asserts that in no city of the same size is there a higher moral tone—a hard saying to those for whom Chicago has been luridly pictured by the late W. T. Stead with ideal Christianity for a background. It is certainly an arena for much devoted philanthropy, like the noted work of Miss Jane Addams and the Hull House settlement.

Among several interesting experiments carried on in and about Chicago may be mentioned the model city of Pullman in the vicinity, founded for the workmen of the great railway-car company who make up a population of 10,000 or more. This seems a first hint for the "garden cities" on our side of the Atlantic. It has model streets, model houses, model gardens, model workshops, model schools, and everything model about it, the only fault being a certain monotony unbroken by a single drinking-shop to tempt its industrious inhabitants from model behaviour. To a stern republican, the blot on its character should be that all these model features are due to a paternal despotism of the employers who have taken such care of their workmen; but an honest American has to admit that popular municipal government has proved itself the weakest point of his country's institutions.

Railways have given Chicago the supremacy lost by St. Louis, which, grown in a century from a fur-trading post to a city of over 700,000 inhabitants, at one time bade fair to be the capital of the Mississippi basin, when its trade was mainly done by steamboats on the great river. There is no love lost between these two rivals. St.



Underwood & Underwood

New Orleans: Dumaine Street, in the old French Quarter

The old part of the city shows the influence of the French and Spanish settlers, who followed the European models which they knew. The streets are often very narrow, and practically all the houses have balconies which extend over the shops, &c., underneath. The balustrades are usually of wrought iron in elaborate design, and seldom are two found alike.

Louis has an older look, her buildings browned by coal smoke and still showing some traces of her French beginnings. Her pride hitherto has been in her parks, in her twenty miles of river frontage, and in her great railway bridge across the Mississippi, where so many lines have their focus at this mart of grain and other produce. Following Chicago's lead, she held a "World's Fair", to mark the hundredth anniversary of the Louisiana Purchase, in which this has come to be the largest city. Half of her Forest Park, a space twice as large as London's chief park, was transformed into a mass of structures ranging from the magnificent Palace of Art to a reproduction of Robert Burns's humble birthplace, the whole planned on a scale to overshadow, if possible, Chicago's show, at least to dwarf the exhibitions of the Old World, and to satisfy the American love of bigness. To thoughtful visitors, however, all the fair's manifold

sights might not be so interesting as a monument of the past a few miles off, one of those truncated and terraced pyramids erected by former inhabitants of the Mississippi basin, this one covering a larger area than the Great Pyramid of Egypt, though the height of the mound appears to have been under 200 feet. In their way, such mysterious erections are not less wonderful than the feats of construction carried out with all the help of modern science, and of the art for which America is still fain to borrow models from certain tiny "played-out" republics on the Mediterranean.

Readers who may have visited St. Louis during its exhibition saw for themselves what is an "up-to-date" city of the States. We have not time for turning aside to such centres of industry and business as Cincinnati, the capital of Ohio, or Pittsburg, the Sheffield of Pennsylvania, whose blaze of

natural gas and pall of furnace smoke suggest "hell with the lid off", or the twin cities of Minneapolis and St. Paul that with 600,000 people may be called the capital of the thickest German immigration. The States contain some thirty cities of over 200,000 inhabitants, three score of 100,000, and at least as many more half that size. We must pass over towns of pleasure like Saratoga Springs, the White Sulphur Springs of Virginia, and Newport with its palatial cottages, which in little Rhode Island plays much the same part as Cowes in our Isle of Wight, but far more luxuriously. Nor can we linger upon modern historic memories, overgrown at such places as Kansas and San Antonio; still less dwell on soon-dead cities, which here and there in the new west, sprung up like a rocket, have fallen as rapidly through the failure of the mines that filled them: one such in Montana was so completely abandoned, that, going on fire, it burned for two days before the conflagration came to be noticed. Let us make a leap from the north end of the republic to the south, where New Orleans represents what once promised to be another phase of European civilization, having been a French and a Spanish city before becoming an American one, which still keeps much of its early character, to make what seems a patch upon the general pattern, in a State that, like Quebec, has framed its laws rather after Roman than English models.

The "Crescent City", as it is called from its original shape, now extending round a further bend, curves its miles of electric glare mainly on the left bank of the Mississippi, about one hundred miles from the mouth. With 340,000 people, the cotton metropolis seems to take life rather more easily than the northern cities, spreading out roomily in wooden mansions and villas, buried among bloom and greenery, each old building flanked by a huge cistern, which shows how it was dependent on rain-water, where people cannot dig wells or even cellars in their swampy foundation; and tombs have to be built up from the ground, in mounds mantled with flowers and foliage, that make the New Orleans cemeteries unusually

picturesque. A water-supply and drainage have done much to lessen this city's bad repute for health, though yellow fever may now and then spread hence up the river. Since the Secession war, several modern buildings have been introduced, such as the Custom House and the Cotton Exchange, to break the general air of old-fashion, where indeed the business quarter, shows a contrast with the sleepy Creole town, in which French and Spanish elements have retired into the background both physically and socially. St. Charles Avenue is the Park Lane of the new quarter; and Canal Street, which G. A. Sala compared to a gigantic edition of Toledo at Naples, divides those two countries, as they may be called, on one side the shops, signs, bright colours of painted stucco, the dirty canals and gutters, and the ill-paved streets named instead of numbered, recalling a European continental town, especially by their Sunday gaiety and in the high jinks of the carnival. There is a considerable German, Italian, and Irish infusion, besides coloured people of all shades, whose readiest tongue is a patois of French and Spanish called "Gumbo". The progressive Americans "up town" deplore the easy-going, slow-coach ways of these fellow-citizens; but the leisurely tourist may here find a sympathetic oasis, and the feature, rare in America, of old churches, among gardens flowering all the year round. The most striking peculiarity of New Orleans is its lying actually below the level of the river embankments, and of the swamps dotted with clumps of moss-bearded pine and cypress, across which West End and Spanish Fort, on Lake Pontchartrain, are pleasure resorts for a fine evening, while the top of the levee, raised more than a dozen feet, makes a promenade that never comes to an end for a people not much given to pedestrianism. Another interest of the vicinity is the battle-field, where, after conquering Napoleon, British veterans were signally defeated by General Andrew Jackson; a feather in the cap of Yankee Doodle, but a needless slaughter, since peace had already been made on the other side of the Atlantic.



The Ponce de Leon Hotel, St. Augustine, Florida

This "last word" in luxury, which boasts itself the lordliest and certainly not the least expensive hostelry in the world, is a conspicuous feature of the American Riviera. The hotel takes its name from the Spanish discoverer of the Florida coast.

The southern cities in general are less thriving than those of the north, some of them half-ruined, as they were, by the War of Secession, but they have an old-world charm for eyes that do not miss signs of hustling prosperity. Richmond, that was capital of the Confederacy as well as of Virginia, has but 130,000 half-negro inhabitants to carry on its trade in tobacco. Raleigh, in North Carolina, commemorates that persistent promoter of British colonization whose efforts first caught fire here, more than once dying out like sparks on the damp tinder of woods and swamps. Norfolk and Savannah are ports of old note. Charleston, the largest place of South Carolina, once the chief cotton-port, is half as large as Richmond. Atlanta, the "Gate City" of Georgia, is a little larger; and Mobile, the gulf port of Alabama, is much smaller. The most rising place in the south-east appears to

be the aptly named Birmingham of Alabama, which, though not half a century old, has outgrown Richmond by the iron industries of this region.

A peculiar interest belongs to the oldest town of the States, the Spanish St. Augustine in Florida, a name given by Ponce de Leon to this luxuriant shore when he landed here seeking the Fountain of Youth among its mazes of wood and water. A warm winter climate has made this an American Riviera, where invalids and idlers find refuge from snow and bleak winds at the sumptuous hotels of Palm Beach and other resorts, as well as exciting sport among the huge tarpon of a broken coast. The Ponce de Leon Hotel at St. Augustine is boasted as the lordliest, and seems certainly not the least expensive hostelry in the world, where Falstaff could hardly "sit at ten pounds a week"; but millionaires from all parts of the

States assemble to live in regal state about the once humble nucleus of their vast emporium, doubling in winter the local population of a few thousands. M. Paul Bourget, in his *Outre Mer*, gives us this impression of a jumble of past and present-day features.

"Hotels and more hotels; gardens and more gardens, filled with oranges, pomegranates, oleanders, and live-oaks; and in the middle of them, the small remnant of a Spanish town, a narrow street going from a ruined fort to the place that was the slave-market—this is all St. Augustine, and exquisite it is. The old street is sinuous. One feels it made, like the Serpent Street at Seville, to draw a current of fresh air in the burning summer days. Its low houses are so close together that the balconies of the single story almost touch each other, making terraces on which to talk at ease from one home to another, amid the flowers and the tropical nights' breath of breezes from the ocean, that beyond, behind Anastasia Island, decks the beach with its waving fringe of foam. In a momentary hallucination you conceive the colonial life of another age, with its narrowness and its perils. Looking at Fort Marion, flanked by wide bastions and enclosed by thick walls, you imagine the attack always imminent. The old town was but a little encampment round this vast citadel, prepared as an asylum for the population. And beside it, colossal hotels vie with each other in luxury, villas succeed villas. You note, as at Newport, if in a lesser degree, what modern America will spend to amuse itself, for what prodigality of cost it is always ready. You calculate how many dollars all those people who winter here must have 'made' to live as they do; and again you feel under the actual America a former America, but so far, so strangely, so irrecoverably buried."

A marked character of its own has San Francisco, chief port of the Pacific, its life at the highest of high pressure, among new communities who think of their eastern fellow-countrymen almost as foreigners. Two generations ago this was a lonely Mexican mission-station, one of the northernmost of Spanish garrisons. When transferred to the United States it had only a few hundred inhabitants; but quickly came the dazzling discovery of Californian gold, then over the barren plains, mountains, and deserts, or round by the Isthmus of Panama,

poured an army of fortune-hunters, who often found death rather than wealth or welfare. The few "old timers" still alive have thrilling tales to tell of San Francisco's early days, when a carnival of crime and debauchery laughed at law, till the famous Vigilance Committee took it into their own hands, and established order by a liberal use of the rope and the lash, as was the history of most of those gold-fields and silver-camps in the West. At the beginning of the century the city had over 350,000 inhabitants, whose morals and tone, if all tales be true, still reflected its adventurous origin. To an uncommon degree, at least, it was gay, pleasure-seeking, living for the day, and so lavish that small change seemed not to be needed west of the Rocky Mountains. California, it will be remembered, has always had a gold currency, even throughout the stress of the war, whereas the dollar is best known to the north-eastern States in the form of dirty paper, while silver was more used in the south.

San Francisco's site is on a sandy, hilly peninsula, shutting in a deep bay, whose outlet, a mile wide, is the "Golden Gate" of the Pacific. Some of the city's chief streets rise upon heights so abrupt as to have prompted the invention of cable-cars, climbing them "like flies on a window-pane". The population is highly cosmopolitan; there is, for instance, a French colony thousands strong, and South Sea Islanders find their way to this great port. At one end of the social scale is the close-packed Chinese Alsatia, whose theatres, temples, gambling dens, and opium cellars make one of the sights, a patch of the East strangely let into the West, for though the immigration of Chinamen is now forbidden, and though there were few women among this alien community, it seems by mysterious smuggling devices to keep up its numbers, who, living like pigs, thrive on the refuse of their fellow-citizens. But San Francisco has finer sights to show: she boasted, against the challenge of Chicago, the largest hotel, the largest store, the largest baths, and other institutions claiming to be unsurpassed in their way, beside the costly millionaire



A Bird's-eye View of San Francisco, showing Kearny Street (leading to Telegraph Hill) on the left and Market Street on the right

In the foreground is seen the *Chronicle* building, the tower of which provides a notable vantage-point from which to view the city.

homes on "Nob Hill", some of them enriched by Old-World masterpieces of art; her Golden Gate Park, rich in semi-tropical vegetation, thrown into lovely relief by the sandy barrenness it replaces; her Presidio fort on the Golden Gate, outside of which a favourite resort commands from the cliffs a grand view of the Pacific with its islands and the Seal Rocks alive with huge sea-lions protected as sights of the city.

The climate of San Francisco is mild and equable, though dulled by rain and fog rolling in from the Pacific. All around extends a beautiful country, mantled with red-wood, live-oaks, laurels, and fruit-trees, here and there showing boiling springs and other volcanic curiosities, and rising into

points like Mount Hamilton, on which the Lick Observatory has "the largest telescope in the world", a claim challenged by the new observatory of British Columbia. Some of these mountains appear to be extinct volcanoes, and the city sometimes felt itself thrilled by usually slight earthquakes, as if to keep up its original Spanish character. For this reason, wood was largely used in San Francisco as building material, to which a false air of stone had been given by a coating of sand sprinkled on white paint; but Anglo-Saxon confidence in the stability of Mother Earth had also expressed itself in huge steel-lined piles of stone architecture, whose strength came to be fiercely tried.

On an April morning of 1906 a gigantic shudder set those buildings rocking or toppling, and hurried the people from their beds into the streets to fly in terror amid a choice of perils. The city took fire at several points, the conflagration spreading with such rapidity that hundreds were burned or crushed or actually frightened to death; while panic-stricken crowds found themselves in danger of being driven into the sea. Succeeding shocks multiplied the ruin and horror of a catastrophe unparalleled in our generation. The water-mains having been broken, the notably efficient American fire-service was paralysed; and the flames had to be fought with cannon and dynamite by the U.S. troops, who also rendered good service in keeping high-handed order, upon precedents of lynch law. A mass of destitute fugitives, packed into the Golden Gate Park, were defended against the storm of fire by battering down rows of houses. When miles of magnificent hotels, banks, offices, palatial residences had been destroyed, the fire rather burned itself out than was checked. Fortunate were they who could escape across the harbour to the mainland. Those pent up between the glowing ruins and the sea stood for a time in danger of starvation. The immediate loss of life was counted by thousands here and in other Californian towns that suffered the same catastrophe. But the practical spirit of the nation was well shown by the measures at once taken to hasten up relief from all parts of the Union; as another feature of American character appeared in the President's declaration that Uncle Sam needed no charity from outside. And it seemed not less truly American that while the ruins were still smouldering, San Francisco's citizens lost not a day in preparing to rebuild it, as has been fearlessly done, at some loss of picturesque-ness. Mr. T. Smeaton Chase, who had visited San Francisco shortly after the disaster that made 200,000 people homeless, describes the transformation brought about in half a dozen years.

"My recollections of that time were of a Sahara of choking grey dust, through which loomed the ruins, apparently of some city of antiquity, just discovered and in process of being excavated. As I climbed, then, along the hummocky streets, I had looked down into gaping chasms hideous with debris, among which sat files of gritty goblins, chip, chip, chipping away eternally at mountains of old bricks. The air rang with the sound of their trowels. Huge girders and shafts of smoke-blackened masonry rose spectrally here and there; and from the sides of the pits twisted pipes projected with a ghastly resemblance to severed arteries. I found now a splendid city of steel and marble, with monster hotels, palatial banks, and sky-scraping office buildings. Here and there a vacant lot still gaped like a missing tooth, and hinted the grim words Fire and Earthquake."--*Californian Coast Trails*.

The census of 1910 found over 400,000 inhabitants regathered in this city, a number no doubt increased when in 1915 it held its exhibition to celebrate the opening of the Panama Canal. There were 150,000 more at Oakland, which, on the clearer and drier inland side of the bay, where many of the citizens have their homes, makes for San Francisco what Brooklyn is to New York.

On this side a long pier is the terminus of the great trans-continental main lines, that are like rivers fertilizing a wilderness, their track bordered by square plots, belonging alternately to the Government and to the Company, which has every interest in fixing adventurous settlers as quickly as may be along its rails. The stations soon become the cores of new communities. "Shops are opened for the convenience of their employees, then other shops for that of the first store-keepers. Is there a mine in the neighbourhood, or the hope of a mine, pasturage or a possibility of it? Immigrants flow in. If some natural phenomenon, such as a waterfall, admits a factory, industries are established." Thus are now growing up rapidly many cities, to-day hardly known beyond their own State; to-morrow to be as rich and renowned as Chicago or San Francisco.

THE PEOPLE

Very early in their history, long before most of the States came to be a "hotch-potch of races", the original settlers began to develop differences, moral and physical, from their parent stock. The circumstances of their environment have told on them in their nasal speech, in the dry complexion, in the spare forms, and in the prominent features by which our race here appears to take on some marks of the Red Indian type. The familiar caricature figure of Uncle Sam, compared with the more rounded outlines of John Bull, conveys a general idea of the contrast between them, though both pictures ought to be somewhat modified to represent changes on either side of the Atlantic in the last generation or two, where "goatee" beards and "side whiskers" have been going out of fashion along with less superficial characteristics. "A highly-electric Anglo-Saxon" is an apt description by which the American has been touched off. Lean, restless, shrewd, curious, confident, cocksure, not much concerned about dignity, jealous of independence, eager in amusement as in business, keen after practical convenience, such are our cousins across the Atlantic, priding themselves on almost proverbial qualities which, as seen by others, sometimes appear run to excess, quantity rather than quality, indeed, being the ideal among a people who have emphatically christened their land "God's Own Country".

The first difference that strikes a Briton is in speech, so strangely at once the same and not the same. As for the so-called "American accent", there are, of course, several regional accents on both sides of the ocean. The common peculiarity in the States is a metallic nasality and sharpness of tone, perhaps brought about by the climate, which, in the mouth of women especially, is apt to jar on an English ear. The use of words, also, shows a growing divergence. Many so-called "Yankeeisms", both of pronunciation and meaning, are

indeed old Anglicisms, brought from their home by the first emigrants, as J. R. Lowell patriotically labours to show. "Platform" is used by Hooker in the same sense as by the American politicians. "Guess", supposed to be the Yankee shibboleth, is as old as Chaucer. When Bacon writes of a "cursed page", he has in mind what sets an angry or fond American parent upon calling his child a "little cuss". "Sick", in the States, means what it means in the Bible, or in the official phrase of our Army and Navy. Not to multiply such instances, we may note how Americans sometimes preserve in daily speech our older grammatical forms, as in "gotten", where we have almost forgotten any longer form than *got*. Some of these archaisms have been, and some deserve to be, readopted in the mother-country. On the other hand, Uncle Sam, with no respect for the past before his eyes, is quick to coin new words, needful or needless, many of which are soon found in our colloquial language, some are naturalized in our literature, and others are thought worthy to find a place in the new Oxford Dictionary, even if they owe their origin merely to the licence of hasty journalists or to popular slang, for the editors of that work remember how the slang of to-day may be the accepted phrase of to-morrow, as in the case of the word "boycott", to take an instance at random from our recent memory. More legitimately America has added to our vocabulary native words like *tomahawk* and *wigwam*, with some French and Spanish ones from her early adventures.

Some American writers have prided themselves on loyal respect for authority; others seem rather to rejoice in the mushroom growths of mob speech, all the more if they sin against linguistic propriety. Certain phrases have "caught on" in America, as not in England; "all the time", for instance, "right here", and the expletives "anyhow" and "anyway", like the Highlander's "whatever", or the German's

'mal. Certain others have taken slight forms of difference: the American lives on such and such a street; he comes in season to catch a train; he makes change as well as connections. We are not surprised to find "master" supplanted by "boss" or "teacher", "servant" by "help", "shopman" by "clerk", "shopwoman" by "saleslady". Many adjectives have here acquired or kept another meaning than ours, as *cunning*, *bright*, *clever*, *ugly*, *homely*, *smart*, *elegant*. Our "rough" is across the Atlantic a *tough*; American *biscuit* is more like our bun, and what we call biscuits are there *crackers*; a coffin is a *casket*, which indeed has changed its shape as well as its name; a stone becomes a *rock*; a jug calls itself a *pitcher*; a cab is a *hack*; and a stick is a *cane* or a *club* according to its thickness. 'To *hunt*, to *ride*, to *fix*, to *ship* are examples of verbs often used in what we find a strange sense. In many cases the American prefers a more pretentious word than ours; he says *location* for place, *vacation* for holiday, *recitation* for lesson, *conductor* for guard, *elevator* for lift, *locomotive* for engine, *compensation* for pay, and so forth. Our "pre-war" is with him *ante-bellum*; but, of course, *the war* was for an American that of two generations back. In forms of speech, his principle seems rather the saving of time by dropping words, as when he talks of a man *suiciding*, *rooming* with another, or of coming home *nights*; and copulative verbs often fall out in the haste of common speech. In spelling, the battle of Worcester's and Webster's Dictionaries has ended with the victory of a system aiming at brevity and consistency by such forms as *labor*, *traveler*, *theater*, *check*, and *program*.

America, so busy in other directions, has hardly yet produced a writer of the first class, but many whose works are known over the world; and the States make a good market for both their own authorship and the most recent publications from London, that till not long ago were freely "pirated", so as to handicap the native author without enriching his British competitor. Now several of the chief English and American publishers have offices on either side of the

Atlantic to carry on a business which more and more becomes an international one. The special "line" of the American book-market has been in sumptuously illustrated magazines that set copies to our trade. There is also a considerable sale for standard works, seeming to betoken an interest in the literature which is our common heritage. But in America, as in Britain, most busy men confine their reading to newspapers, that in large cities have come to be hourly rather than daily issues, feeding an eager excitement after some new thing, true or false. The American Press, with occasional exceptions, cannot be said to represent a high level of morals or culture. Its merits are enterprise, cleverness, and quickness to feel the pulse of public opinion; its demerits are unscrupulousness about truth, impudent intrusion into private life, intemperate vilification of political opponents, a flippant handling of great as of small matters, a general straining after catch-penny sensation, such as would ruin the character of any London newspaper, though indeed for good or evil our Press seems of late to have been taking hints from America. But the "interviewer" and other newspaper spies are with us modest and discreet as compared with their prototypes over the Atlantic; and our most pushing organ would as yet shrink from such "scare-heads" and shameless personalities as spice the popular sheets of America.

The way in which the average American allows himself to be humbugged by reporters, advertisers, and wirepullers, to be imposed upon by "puff, bluff, and boom", gives no higher testimonial to his instruction than to his shrewdness, which seem chiefly turned upon making a livelihood. That caustic critic, Mr. H. G. Wells, puts it thus in his *Mankind in the Making*: "If ninety-nine people out of the hundred in our race are vulgar and unwise, it does seem to be a fact that while the English fool is generally a shy and negative fool, anxious to hide the fact, the American fool is a loud and positive fool, who swamps much of the greatness of his country to many a casual observer from Europe. Altogether, American books, American papers,

The United States



Detroit Photo Co

Yale University: the Campus, with Phelps Hall (on the right) and Lyceum (centre)

The United States possesses many universities of more or less distinction, of which Harvard and Yale are the two best known. The former is the older, and has a larger number of students, but Yale would probably admit little, if any, inferiority to its great rival.

American manners and customs seem all for the ninety and nine." Yet education is a matter carefully attended to by the States, whose prerogative it is to shape their own systems of schooling. In their troubled early days school-houses soon sprang up among backwoods settlements, and now two out of the thirty-six blocks into which each new township is divided are reserved as an educational endowment. Every child in the country has the chance of being taught in elementary common schools, and a large proportion take advantage of more advanced teaching, for which also some of the young States have made provision from the first. Much, indeed, is done for higher culture. Of the seven score or so universities set up in the United States not all answer to our idea of a uni-

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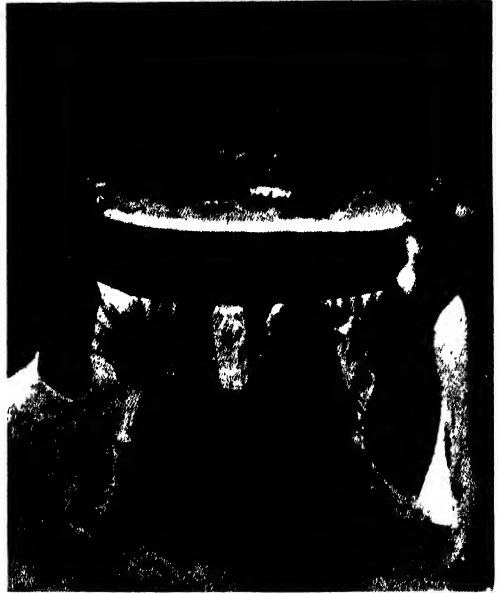
versity, but some have taken a very high rank in the intellectual world, and many new ones will no doubt throw the same renown upon names that sometimes strike us oddly as commemorating private individuals, though, after all, the Johns Hopkins University of Baltimore and the Harvard University of Cambridge are but a repetition of our Balliol or Owens Colleges. Nothing is more remarkable in the States than the munificence of rich citizens to educational institutions, a matter as to which Bishop Latimer could here not complain on behalf of impecunious scholars. When Chicago set up its university, a million dollars were subscribed in a day; and one of the contributors presently added two more millions to provoke emulation, while a single benefactor has at different times endowed it

The World of To-day

with over £6,000,000. Another millionaire has lately bequeathed £1,600,000 to a Natural History Museum founded by him. The Leland Stanford, Jun., University, in California, was, in memory of their only son, founded by bereaved parents with thirty millions of dollars. A similar bereavement led a Massachusetts lawyer to devote his whole fortune to the establishment of the Wellesley College for women.

Besides schools and colleges open to both sexes, some of the most fully equipped educational institutions are devoted to women, who find no hindrance in entering life as doctors, lawyers, professors, journalists, and, in the teeth of St. Paul, as preachers; while they now begin to claim a share in the industry of politics, having long helped in the manufacture of public opinion by organizing themselves into clubs and societies. There are colleges whose students of both sexes earn their livelihood by acting as waiters at summer hotels; and no false shame hinders the successful American from pride in such exertions, by which he may have been able to "burst his life's invidious bar". Not a few famous men here have begun by "teaching school", as starting-point of a career which often displays the pliant versatility of Brother Jonathan in passing from one class and calling to another. It may be said that purely intellectual pursuits, as ill remunerated, have been too little held in respect by this practical people; but now "college professors" and the like can aspire to make an elevating influence felt in the public life from which they hitherto were rather apt to stand aside.

Among the many educational institutions of the States are several devoted to interesting experiments in the elevation of its subject races. At Tuskegee in Alabama is a negro college, the late Booker T. Washington its first head, himself a coloured man, born in slavery, who gained respect by his efforts to raise his own people and was found worthy of holding public office, though there came an outburst of the old contemptuous rancour when President Roosevelt entertained him as a guest at the White House. The institution has here some 1400 pupils of both



Some Smile! A typical negro boy eating water-melon

sexes, from the age of fourteen upwards, who in part pay for their education, or give in return their work at the trades taught them, the college being mainly built and furnished by their own hands. Its promoters strongly believe in their capability of moral and mental progress, and can point to negroes who have distinguished themselves in various branches of learning; yet these seem to be, like Booker Washington, exceptional cases; and it is naturally the cream of the black youth that comes under this fostering care. It appears to be the case that a negro is sharp at learning by rote and in such an imitative art as writing; but that in reasoning power and self-control he fails as a rule to keep pace with the white student, as might be expected from his heredity. Booker Washington was encouraged by the success of his work; but some Americans could be secretly thankful that men like him are not likely to raise more than a fraction of the negro community to their own level, else there might be an awkward reckoning between the ex-masters and the ex-slaves, the latter already a disturbing element in the national life.

This is only one of several such institutions, whose best work seems to be in training teachers for their own race. The first of note was at Hampton in Virginia, that included both negro and Red Indian pupils. At Carlisle, Pennsylvania, and elsewhere in the west, there are industrial and agricultural schools for young redskins, taught to turn tomahawks into ploughshares and medicine bags into spelling books. One can hardly fancy an Indian brave sitting down to books; and in this case also there is matter of dispute as to how often religious and civilizing influences go more than skin deep. When "Fighting Bull" has his name Anglicized as John Bull and "Bob-tailed Coyote" as Robert T. Wolf, there may be some doubt as to his nature being much changed. But the practical training of such schools will seldom be thrown away; and their zealous conductors are able to point to not a few pupils who have "made good" as ministers and missionaries, teachers, lawyers, doctors, veterinary surgeons, nurses, soldiers, engineers, professional athletes, and so forth. Whether or no they take kindly to the three R's, both young Indians and negroes are found very ready to adopt the games of the white scholar, throwing themselves keenly into the study of baseball and football.

"College-boys" are here as strenuous in play as in work. Their football matches are so fierce that the players take the field in a sort of ungainly armour, which does not protect them from frequent accidents. Cricket seems too slow and unexciting to thrive in America, unless, it is noted, about such a sober city as Philadelphia. The national game is baseball, a development of rounders, which, as performed by skilful and highly paid professionals, attracts yelling crowds of all classes, as do our football spectacles for the vulgar. As with us, the amusement too much takes the form of looking on; and there are ugly stories of mercenary athleticism, even in college teams.

The upper class, if such a thing may be named in the States, have in the last gene-

ration taken to golf, polo, and lawn-tennis on British example; and the cities have their "country clubs", in the grounds of which, a little way out of town, the less un leisured young men can give themselves to such pastimes. What is misnamed "sport" has so stirred the American conscience that in some older States, horse-racing, with its sauce of betting, has been prohibited by law. Where racing goes on, it takes the more practical form of trotting-matches, the blue ribbons of the Yankee turf going to a horse that can trot a mile in two minutes or so. Yachting, rowing and swimming are in high favour, as all sorts of skimmings over ice and snow in winter. Shooting and fishing are too practical pursuits to be neglected; the hunting of coons, jack-rabbits, and other nuisances is a popular amusement; some parts of the country even keep up a pack of fox-hounds. But in general it may be said that Uncle Sam gives up



Young America: a youthful member of a boys' sweet-corn club

active exercise sooner in life than John Bull, and for excitement looks to his all-absorbing business rather than to idle pleasure. Mr. Arnold Bennet (*Those United States*) points out how the American is as eager to get to his work as the European to get from it.

"The attitude of the American business man towards his business is pre-eminently the attitude of an artist. You may say that he loves money. So do we all—artists particularly. No stock-broker's private journal could be more full of dollars than Balzac's intimate correspondence is full of francs. But whereas the ordinary artist loves money chiefly because it represents luxury, the American business man loves it chiefly because it is the sole proof of success in his endeavour. He loves his business. It is not his toil, but his hobby, passion, vice, monomania—any vituperative epithet you may like to bestow on it! He does not look forward to living in the evening; he lives most intensely when he is in the midst of his organization. His instincts are best appeased by the hourly excitements of a good, scrimmaging, commercial day. He needs these excitements as some natures need alcohol. He cannot do without them. On no other hypothesis can the unrivalled ingenuity and splendour and ruthlessness of American business undertakings be explained."

The old Puritan Congregationalism, that was practically the Established Church of New England, no longer holds its predominant place, its Calvinistic theology, too, having thawed away like an iceberg; and everyone, all over the States, is free to worship in his own fashion. There are Churches of all kinds, from the blindest fanaticisms to highly critical bodies, which seem to pride themselves on having brought Christianity "up-to-date", and on setting forth its doctrines in a taking light with all the modern improvements, in contrast to less sophisticated believers who seek to foster their faith by bursts of hysterical excitement. The most numerous bodies of Protestants are Methodists and Baptists, the former strong in negro members, while some much smaller Churches, as the Quakers and the Unitarians, have in certain parts exercised a moral or social influence out of

proportion to their numbers. There are said to be seventeen different sects of Methodists and thirteen of Baptists; and the whole number of American creeds is legion. Some curious forms of fanaticism were introduced here from Europe, to thrive on congenial soil when extinct or moribund in the land of their birth, one example being the Glassites or Sandemanians, who were the first dissenters of Scotland. Others, like the Shakers and the Mormons, are of native birth. Buddhism and other forms of Eastern mysticism have taken some root in the busy West, where they will hardly find so much depth of earth as do more vulgar forms of superstition. Spiritualists are numerous and active, whose ideas can be interwoven among those of other bodies. The Salvation Army is in strength here. Among this Babel of faiths, the Episcopal Church has a certain prestige inherited from days when all America was in the diocese of the Bishop of London. After the Revolution there was a difficulty as to providing this segregated flock with duly ordained pastors, since the English prelates would not consecrate a bishop who refused to take their oath of allegiance. The Apostolic succession had to be secured by consecration at the hands of nonjuring bishops of the Scottish Episcopal Church; and in memory of this filiation American Episcopacy keeps the use of the Scottish Communion Office, while it has dropped the Athanasian Creed from its services, and lays aside the pride of titles and peculiarity of costume still cherished by Anglican dignitaries.

The mass of the people are Protestants of one or other shade; but the largest and most solid community is that world-wide one whose imposing history and elaborate organization put it at such advantage against the broken ranks of rebels from its authority. A dean of our National Church testifies to the Roman Catholic fanes of America as the most beautiful and church-like; and an observant layman has significantly pointed out how they are topped by a cross, as other churches here more often by a weather-vane to shift with every wind of doctrine. The

Roman Church, what with its natural disciples from Catholic countries, what with its politic sympathy with Socialistic aspirations of the working-class, and what with converts made from a class at leisure to cultivate æsthetic religious sentiments, now counts its flock at over 12,000,000, with ninety bishops and thousands of priests; and the apparent growth of its power, all the stronger for freedom from kingly patronage, is one of the signs of the times. On the other hand, Protestantism, here as elsewhere, seems to be undergoing developments that may oppose a new force of resistance to the older faith.

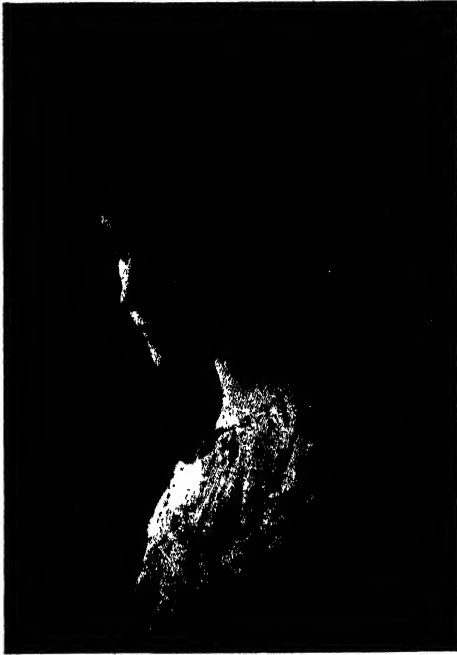
But to consider fully the state of religion in America would take us too far, and over ground too hot from smouldering controversy. This much is noted by outsiders, that with all America's zeal for building churches, it seems to fall short in reverence for invisible as for visible powers. The manner and methods of popular preachers often jar upon believers with less appetite for "go" and "snap" in their religious exercises. Even vulgar slang and blatant advertisement are used to recommend the gospel.¹ Among devout readers of the Bible, swearing, as well as spitting, is common to a degree that would scandalize respectable circles on this side the Atlantic. "Cranks" of all kinds are numerous; notable among the hard-headed majority; and it must be owned that charlatanism in religion, as quackery in medicine, flourishes more hugely in the United States than in our backward land. Yet the greatest reli-

gious imposture of the West, the Mormon Church, has found most of its deluded converts among the poor and ignorant of Europe, and now appears to make more head in Polynesia than at home. A later "prophet" named Dowie, a Scot by birth, fanatic or impostor, led away many to his "Sion City" on Lake Michigan, where were united crazy credulity and business enterprise; but this sect seems more like to come to naught. Mormonism has still hundreds of missionaries at work over the world, who can appeal to the material prosperity of its converts, numbering some 300,000 in Utah and adjacent States; judged by such fruits rather than its doctrines, it has indeed much to say for itself. And if this criterion be applied to American Churches in general, it would be hard to find a nation where all forms of faith bear such a good crop of philanthropic charities, from the "settlements" of the city slums to the gigantic subscriptions raised to alleviate sensational calamities.

The "Almighty Dollar" has been called the god of America, but this seems often worshipped as mere symbol of the energy in work and business which is Uncle Sam's most inspiring religion. He is as generous in spending his money as too unscrupulous in making it. Every day one hears of some vast benefaction bestowed by a millionaire upon his native town or State. On the land of his birth and that of his activity the late Andrew Carnegie is calculated to have bestowed from first to last gifts amounting to £80,000,000. The accumulating of money

¹ "I found a place that was officially described as a church. It was a circus really, but that the worshippers did not know. 'There were flowers all about the building, which was fitted up with plush and stained oak and much luxury, including twisted brass candlesticks of severest Gothic design. To these things, and a congregation of savages, entered suddenly a wonderful man, completely in the confidence of their god, whom he treated colloquially and exploited very much as a newspaper reporter would exploit a foreign potentate. But, unlike the newspaper reporter, he never allowed his listeners to forget that he and not He was the centre of attraction. With a voice of silver and with imagery borrowed from the auction-room, he built up for his hearers a Heaven on the lines of the Palmer House (but with all the gilding real gold and all the plate-glass diamond) and set in the centre of it a loud-voiced,

argumentative, and very shrewd creation that he called God. One sentence at this point caught my delighted ear. It was *apropos* of some question of the Judgment Day and ran: 'No! I tell you God doesn't do business that way.' He was giving them a Deity whom they could comprehend, in a gold and jewel Heaven in which they could take a natural interest. He interlarded his performance with the slang of the streets, the counter, and the Exchange, and he said that religion ought to enter into daily life. Consequently, I presume, he introduced it *as* daily life—his own and the life of his friends. Then I escaped before the blessing, desiring no benediction at such hands. But the persons who listened seemed to enjoy themselves, and I understood that I had met with a popular preacher."—Rudyard Kipling's *From Sea to Sea*.



An American Belle

Woman in America holds a higher place than in any other country.

in the hands of a lucky enterpriser may, indeed, go on so fast as to embarrass one whose life of hard work has given him neither taste nor turn for luxury, even if republican sentiment did not discourage such displays of wealth as are almost forced upon the wealthy citizen of older countries. The "kings" and "barons" of American markets are said often to reach a pathetic old age, burdened by millions which they know not how to get rid of, and sometimes give back to the public rather than see them flung away in folly by worthless heirs. How rich and idle young men are apt to turn out, we know; but in America such sons of fortune sometimes show the quality of ingrained industry, going on to add millions to millions at a rate that seems a danger to the public weal as well as to the owner's soul. The daughters take more gracefully to the responsibilities and distribution of wealth, which, through them, in so many cases, goes to regild a tarnished title in the Old World. While work is the

man's title to respect, refinement, culture, and religion are in America left much in the hands of women, who, for their part, evince a most business-like energy in their philanthropic organizations.

Woman here holds a higher place than in any other country. The roughest man, who among his fellows can hardly open his lips without profanity, shows respect to her presence. While the American humorist jests freely and flippantly on all other sanctities of life and death, one class of wit, supposed to be congenial to smoking-rooms, has not flourished here. What is called the "social evil", if not absent, has been strongly interdicted by public opinion. The moral tone of family life is high, perhaps not the less so for the facilities of divorce given by the law of certain States. To wrong or insult a woman is the unpardonable sin of American society. Bret Harte and other writers have shown us how strong this sentiment is in the rudest and freest conditions of life. It is among the more refined communities of large cities, rather, that the vices as well as the restraints of European society tend to engraft themselves upon republican simplicity. In the older eastern States the chaperonage of Mrs. Grundy is held in more honour, where indeed a sophisticated minority sometimes push their protest against the general tone of manners to a point of preciseness that gives target for satire. We have no dandy quite so absurd as an American "dude"; but, on the other hand, the "fast girls" of London "smart sets" seem ill-represented in America, even amid the expensive freaks of its "society", though sometimes pushed to a point of folly hinting at demoralization.

Sex has here assumed much of the respect that by other peoples is granted to age. To be young is nobility with vigour as title; and marriageable women are the queens of the republic. The independence, sometimes degenerating into impudence, of the American girl, is well borne but by her pride and confidence in her own honour; or, as one of her country's writers more coldly puts it, she seldom altogether loses her heart and never her head. At all events, for good

or evil, she takes and gets a great deal of her own way. • Children of both sexes seem to our old-fashioned ideas apt to be spoiled, precociousness being welcomed as augury of the go-ahead qualities that win success in manhood. Young men push themselves to the front in virtue of energy rather than of experience. Old folks learn to take a back seat in the family, more or less softly cushioned by the indulgent affection of their offspring; and sometimes it is almost tragic to see how a parent continues to be tolerated, as an efficient money-making machine, by children who have surpassed him in the graces and accomplishments of life.

There seems a certain over-tension in the hustle and bustle of American life, where, in moments of idleness, a rustic takes to whittling, or spitting, rather than do nothing; and among young people the chewing of gum, or of candy, replaces a more offensive use of tobacco. A constant strain on the nerves, along with the dryness of the climate, goes to make Uncle Sam lean and fidgety. The habits of domestic life tell on him unwholesomely. In winter he keeps his house heated by stoves to what we find an uncomfortable point. He is apt to eat too fast, and of a mixture of indigestible dishes, ranging from the prodigal menus of a New York restaurant to the slatternly make-shifts of a pioneer's hut. The result is much custom for doctors, dentists,

druggists, and an army of lying quacks. Another unhealthy habit in America is surely the swilling of ice-water, a domestic dissipation that replaces the intemperance so fatal in pioneer communities. Iced cream and iced effervescing drinks are to all classes the temptation the "hokey-pokey" of Italian barrow-men is for our ragged urchins. In the older settlements, temperance was the



Underwood & Underwood

New York: a quiet forenoon on Lower Broadway

The traffic congestion in New York is very unpleasant, and the crossings are dangerous. In such great arteries as Fifth Avenue the traffic is regulated all the time from signal-boxes placed in the middle of the street. In the main thoroughfares trams run all night, and taxis are as numerous between 3 and 4 a.m. as they are between 3 and 4 p.m.

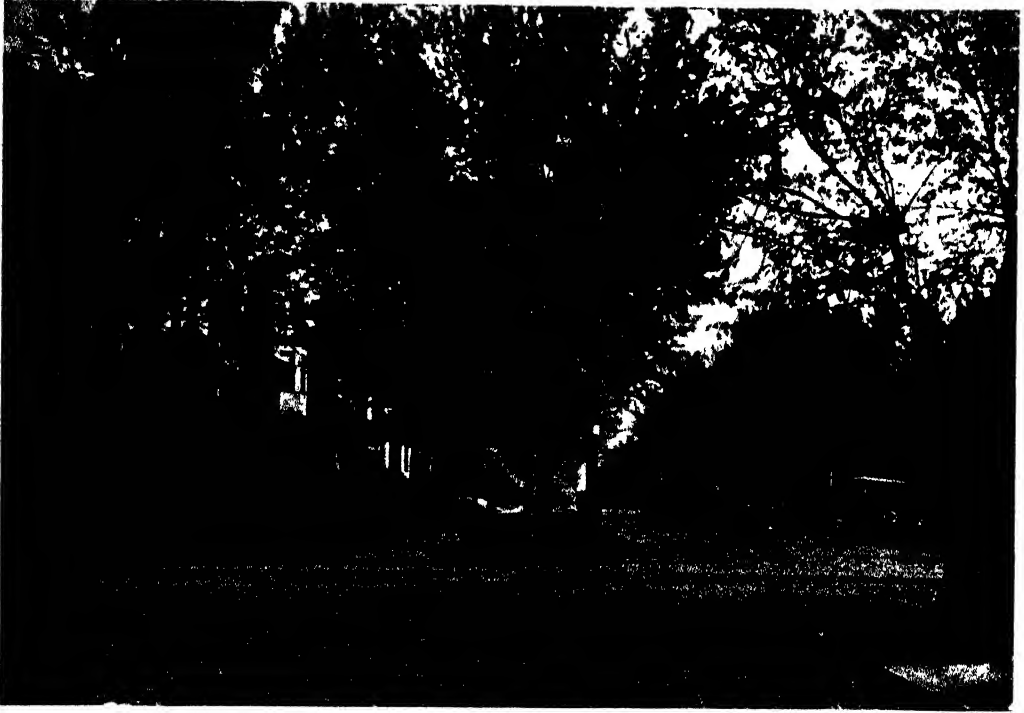
rule, and some States early took measures to keep themselves sober by law. What drinking of spirits went on was done at bars rather than with meals, and not often in presence of women. As excess became banned, a change in American abstinence was noticed. The high price of good wine confined its use to the rich, while the German element largely introduced the use of light beer. An habitual drunkard would be a marked man in decent neighbourhoods; and for a woman, tipping implies a lower depth of degradation than in our country. One occupation was here barred to her by public sentiment, that of "tender" at the "saloons" and other dispensaries of drink, whose frequenters might forget the respect due to her sex.

In the last two generations or so there was a good deal of tinkering at State liquor laws, often found unworkable or notoriously evaded by tricks that went to demoralize loyal citizenship. For instance, at an hotel one might ask to see the baby and present the "dear little fellow" with ten cents, whereupon the landlord would invite his visitor to take a drink gratis. In States where a snake-bite was admitted as excuse for the glass, a "tall story" represented a long queue waiting their turn, till informed that the "snake was tired and could bite no more that day"! Medical prescription made, of course, a frequent medium for indulgence. In certain "dry" towns everyone concerned knew where drink was dispensed behind drawn blinds and doors not left open. But the temperance enthusiasts pressed their campaign till, before the War, some score States had "gone dry"; then, during its stress, advantage was taken of the special conditions to obtain the necessary consent of a majority of States to a war-time Prohibition Act, which, though opposed by the President, was pronounced constitutional by the Supreme Court. This was succeeded by a Federal amendment to the Constitution, absolutely prohibiting the manufacture, sale, or importation of intoxicating liquors, a law which came into force in January, 1920.

There has, perhaps, never been such an attempt at sudden revolution in the social habits of a great people; and it has naturally

aroused indignant resentment on the part of many, themselves no slaves to drink; while an indirect result of enforced abstinence from alcohol is said to be a craving for sweets as well as for deleterious drugs. It is a question if a majority of voters, on direct appeal, would not repudiate the law, as also how thoroughly its provisions can be enforced. These are so drastic that it becomes a crime to carry a pocket-flask, to give or receive a present of liquor, or to prepare any intoxicating drink in one's own house. Excise officers may well prophesy that it will be years before a free people can be duly broken in to obey these grandmotherly regulations for its welfare, which at first were openly defied or artfully evaded by thirsty citizens. It is calculated that the effect of the law will close more than a thousand distilleries and breweries, with drinking bars by hundreds of thousands, throwing a great number of people out of employment and losing for the republic a revenue of at least two hundred million pounds. It is, moreover, forecasted that a larger number of rich and leisured Americans will carry their fortunes abroad to live outside of those restrictions; if so, that ill wind of thirst may blow some good to hungry countries in Europe. We are not surprised to learn that the confirming or repeal of such sweeping legislation made a plank in the late Presidential election; and it seems possible that wine and light beer may be exempted from the condemnation of spirit-drinking that has already shown marked effect on statistics of crime.

As might be expected, the new voting power of woman had much to do with this "Pussyfoot" crusade against the insobriety of sons and husbands that had so often added to her troubles. It is on woman that the life and the climate seem to tell more quickly. Her delicate beauty grows worn and haggard sooner than with us. The cares of housekeeping are heavier and less grateful to the American matron. In the lower class, if this phrase be not resented, she may have wider interests which prevent her mind being contentedly given to cooking and sweeping. In easier circumstances, she



A Charming Residential Street in an American Town (Denver, Colorado)

Denver—"Queen City of the Plains"—was founded in 1858, and is a striking example of the marvellous growth of Western cities. In this shaded avenue of luxurious dwellings it will be noted that walls or railings on the street frontage are conspicuous by their absence.

is harassed by the inefficiency of domestic service, that in a less degree begins to be felt among ourselves. Rich men can now enlist obsequious foreigners or recreant Americans in their households; but outside of cities, where society more and more divides itself into layers of class, a flunkey makes an object of amazed contempt, and the untidiest hussy is shy of putting herself in a dependent position, even when the name of servant has been disguised as "help". Irish or other foreign "hired girls" are much in demand, till they, too, learn to assume republican equality. Niggers are the natural helots of this state; niggers, too, have come to know their own value; and boys do not always prove duly subservient menials. Boot-blackening has been a specially ticklish point, so that an American dandy was fain to wear patent-leather shoes and polish them himself, if he could not come

upon some underling so poor as to undertake this degrading duty. In the cities it is stooped to by negroes and others whose lowest charge is ten cents; and in the best hotels one no longer need "put out" one's foot-gear without result. The bold bad baronet of our melodrama may, on the American stage, be a British aristocrat, who haughtily orders the virtuous Yankee to clean his shoes, and has such insolence flung back with high democratic scorn.

This difficulty of domestic service has been met by the truly American ingenuity of mechanical contrivance. A sumptuous house is veined by lifts, pneumatic tubes, electric wires, and other apparatus for saving time and trouble, as far as possible. In a large hotel, the inmate makes his wants known to a great extent by electric signals, pressing one button for a drink, another for a carriage, a third for a messenger, a

fourth for a doctor, and so on. Necessity here has proved the mother of invention; and the American notoriously does everything he can by machinery, even his politics. His very house, in an early stage of prosperity, will often be built so that it can be removed bodily to another site. While, after Franklin, he can hardly boast great scientific discoveries, he abounds in patents for coining millions of dollars. He has excelled all nations in turning to use the powers of steam and electricity, which, in less than a century, have made such a difference to half the world. Not to speak of his reaping-machines, sewing-machines, typing-machines, apple-paring machines, pork-chopping machines, and the like, of his steam-ploughs, steam fire-engines, of his cheap clocks and watches, of his cash-registering devices, of his corn-elevators, he can boast that his country contains as many rails as the rest of the globe put together, on which each person makes an average journey of from 200 to 300 miles yearly. Telegraph wires are the nerves of his intense national life. Automobiles multiply the dangers of his crowded streets, and raise clouds of alkali dust on his western deserts; he has lately calculated with pride that his motor-cars outnumber ours ten to one in proportion to the population. He can now travel all the way from New York to Chicago by electric trolley-cars that carry his cities far out into the country; and, both in town and country, the telephone is almost as familiar as the door-bell in our households. But American postal and telegraph services are inferior to those of Britain, in this respect not a "back number".

The American railway system has its strong and its weak points. Among the latter are a certain happy-go-luckiness and recklessness of accidents over which the heedful mother country shakes its head: in one year 10,000 people were killed and 75,000 injured on American railroads, the butcher's bill of a great campaign. Among the former are an absence of the grandmotherly care shown on our lines, and still more for well-drilled Continental peoples. The "depot" is not laid out, like our

stations, with consideration for public safety rather than convenience; one jumps on the train as one can; one may take a ticket from the conductor, if not already provided by competing agencies; one gets out when one pleases, to resume the journey as convenient; one has no anxiety about one's luggage—collected, kept in charge, or delivered in one's room by "Express Companies", called into activity by the expense of cab hire and the want of independent citizens disposed to hang about for odd jobs. The "cars" are supposed to be of one class; but this republican equality becomes differentiated by the luxury of "palace" and "vestibule" trains, and by the bareness of "emigrant cars". Even ordinary carriages, open from end to end, are furnished with such conveniences as stoves and the indispensable "ice-water", and perambulated by youthful hawkers of all kinds of wares, from candy to books, with a persistence some travellers find a nuisance. For long journeys the trains have sleeping accommodation, dining-cars, not to speak of "observation" cars and luxurious private cars, or "state-rooms", with some of the comforts of a moving hotel, even to barbers, baths, type-writers, libraries, and pianos. In all such matters our own recent improvements have come from America; but we have bettered its instruction in the matter of sleeping-car arrangements. Brother Jonathan's good humour, along with his want of good manners, is shown in his rush to take tramcars and trains by storm, already close-packed with men and women content to make a hasty journey home as the bunches of "strap-hangers", of late become a familiar experience to ourselves. With all such hustling, however, the general speed of railway travel is greater in Britain than in the States, though there certain renowned expresses vie with our "Wild Irishman" and "Flying Scotsman".

On this side of the Atlantic we have less need to imitate some features of American railways which strike us as peculiar. The engines, larger and stronger than ours, are built with a bulging funnel, wider at the top than at the bottom, adapted for burn-

ing the wood that was at first their plentiful fuel. In the north, where trains run the risk of being stopped by heavy storms, a snow-plough may be fastened on in front to clear the way, which among the mountains has often to be roofed in by a line of snow-sheds. The locomotive is commonly equipped with an apparatus called a cow-

A word should be said of the hotels, on which a traveller's comfort so much depends; and not only a traveller's, for many Americans, less attached than we are to privacy and more destitute of domestic service, make their homes in public mansions. The typical American hotel is, indeed, a boarding-house, which runs to bigness as



American Railway Travelling : Observation car on the "Twentieth Century Limited"
(New York Central Railroad)

catcher, for dealing with animals that stray upon unfenced lines to an encounter apt to be "bad for the coo". But it is bad for the passengers if their car happen to run over a skunk, which in death can take an overpowering revenge. And another cause that seems tiny enough sometimes brings a train to a stand in the wilds, where rails may become covered with such a multitude of worms or locusts that the wheels get so greasy as no longer to turn on their Juggernaut course.

its chief merit, and to ways more business-like than homely, yet often with most sumptuous accommodations. One pays a fixed charge by the day, for which one gets meals at fixed hours and no others, to the dissatisfaction of the weary and hungry traveller who may reach a tavern after supper-hour, but not such a hardship at one of the great caravanserais, where one could eat one's way through succeeding bills of fare almost all day long, paying no more than for one's bed. This "American

plan " is, in cities, supplemented by hotels run on the "European plan", that is, of having and paying for what one requires, an arrangement which, indeed, appears to be on the increase. Charges of course differ: it may cost less than five dollars a day for full board, or more for a room alone at the sumptuously equipped and gorgeously decorated palaces of the great cities. Another marked change has come over American hotels. A generation or so ago it was an insult to offer any American a tip, though the Gibeonite negroes, foreign waiters, and Irish maids had no scruples on the subject. Now, by barbers also, tips are expected or even exacted like blackmail, without much show of the civility which in England is perhaps bred by expectation of such gratuities. The British traveller, often blamed for his reserve, must make up his mind to do without what signs of deference he expects at home, but must show himself duly observant to persons in petty authority. A standing joke to the Americans themselves is the manners of such officials as hotel clerks and railway conductors, beside whom sometimes our extinct beadles might seem types of humility. On the other hand, examples of native serviceableness and friendliness will often strike the traveller in his dealings with all classes. Comparisons are proverbially odious as well as difficult; but one may consider the general standard of good-will to strangers higher in America than in England, if in both one misses the warm courtesy of the Celt and the ingrained politeness of Latin peoples.

Uncle Sam's great fault of bearing, the boastfulness natural to a young and thriving nation, has been a good deal toned down since the soreness of its chastisement by monitors like Mrs. Trollope and Dickens. He now, indeed, develops a turn for self-criticism that comes with growth in wisdom as well as in stature. As the exuberant bumptiousness of his early patriotism hardens into a more manly temper, he has not so much "use for" bunkum oratory or childish demonstrations of his independence. A few years ago, more than two hundred persons were killed and several

thousands injured in the explosive celebrations of Independence Day; but now for the first time a sane "Fourth of July" has passed off without serious accident, common sense replacing unrestricted fireworks and firearms by harmless pageants and parades. The true American even begins to doubt if his Constitution be the eternal verity of politics; and the more he has to be proud of, the less inclined is he to swagger about it. He still cherishes an almost idolatrous veneration for the flag which he has the satisfaction of looking upon as the plainest, not to say the ugliest, in the world; but he sometimes asks himself whether all its new stars and stripes are not blurring the original pattern, or merging into a different effect of gaudy contrasts. The rapid annual increase of population is half made up of foreign immigrants. In some central States it is said that a third of their population is of alien birth. There was a time when those new citizens came rather from the northern countries of Europe; but now the majority of them are from the less congenial peoples of the South and East: Italian, Austrian and Russian ex-subjects. It would surely be a loss to the world if the invasion of "Dutchmen", "Dagos", and "Sheenies" were too much to alloy a national character sympathetically summed up by Mr. T. F. Muirhead in his *Land of Contrasts*:

"It includes a sense of illimitable expansion and possibility; an almost child-like confidence in human ability and fearlessness of both the present and the future; a wider realization of human brotherhood than has yet existed; a greater theoretical willingness to judge by the individual rather than by the class; a breezy indifference to authority and a positive predilection for innovation; a marked alertness of mind and a manifold variety of interest; above all, an inextinguishable hopefulness and courage. It is easy to lay one's finger in America upon almost every one of the great defects of civilization—even those defects which are specially characteristic of the civilization of the Old World. . . . But below, and behind, and beyond all its weaknesses and evils, there is the grand fact of noble national theory, founded on reason and conscience."



Tobacco-planting, Connecticut

Underwood & Underwood

THEIR INDUSTRIES

America has the advantage of being self-supporting in the necessities of life, while other nations depend on her both for luxuries and for materials that have become necessities to them. Of her huge volume of trade, the great bulk is internal; and the next largest part has been with the United Kingdom, into whose hands, to a great extent, came the profit of its ocean transport. The Great War seems likely to make a difference, notably in setting Brother Jonathan upon owning more ships. The Civil War had been a serious blow to American shipping, nearly equal in tonnage to that of Britain, but for a time chiefly made up of coasting-vessels, and of the various ingeniously adapted craft that ply upon the lakes, canals, and navigable rivers opening up the centre of the country. The picturesque schooners that used to dot the Great Lakes have now indeed vanished in wreck and rottenness, their place taken

by steel-framed steamers, one of which on an average passes every quarter of an hour through the "Soo" canal between Lakes Superior and Huron during the ice-free season. The huge steam-arks of the Mississippi and other water-highways are known to us, if only in pictures. The productions that supply such a volume of trade hardly need bringing to notice, but their relative importance may be summarily indicated.

The United States can claim to be the greatest industrial country in the world, always alert in developing its resources and adding to its enterprises. Even the silk for which it is France's best customer, is now to some extent woven on American soil. The South begins to weave its own cotton, profiting by cheap coloured labour, here, indeed, at friction with a growing class of "poor white trash"; else, the manufactures of wool, cotton, iron and steel, &c.,

have been chiefly concentrated in the North-Eastern States, whence, fostered by Protection, they supply the needs of the Republic, while, by efficiency of labour and machinery, some of them compete abroad with the wares of foreign markets, in spite of high wages and high prices behind the wall of American tariffs. This is not the place to enter into a controversy on Free Trade, which in the judgment of some authorities might prove a gain for America to the loss of our own manufactures. In 1913, under President Wilson's administration, the policy of High Protection was relaxed by abolition of the duty on some articles of food, and certain raw materials and kinds of machinery, while on others, as on manufactured goods, the tariff has been considerably reduced. How this change will work it seems too soon to say. Hitherto, for one instance, good clothes have been so dear in the States that an American gentleman could make a trip across the Atlantic pay, in supplying himself from an English tailor. Ladies returning from Europe crammed their boxes with finery, jewellery, and such luxuries, the temptation to smuggle which is so great, that detectives have sometimes made part of a great Atlantic steamer's company, to the confusion of fair passengers who found rash confidence betrayed. A dirty Jew may be seen landing bedizened with gems, by which he passes off his stock in trade as personal apparel. There is a high duty on recently produced works of art, as to the value of which differences of opinion are likely to arise between the proprietor and the assessor on behalf of Government. Travellers have tales to tell going to show how custom-house officials here are not always incorruptible, while often rude and exacting; but the American, with all his love of liberty, seems unduly patient under such tribulations. It is, of course, impossible as yet to sum up the differences which the War and the exchange problems it left behind may bring about in the trade relations of the two continents; but the Republican party, now in power, is understood to be committed to a policy of higher tariffs.

It is noticed that the industries best protected against competition are just those in which the United States least excel, whereas a Free Trade regime has put our manufacturers wholesomely on their mettle to stir enterprise out of the sleepy ways into which they fell through a too easy mastery in the world's markets. So far as textile goods are concerned, we are ahead in quality, our transatlantic rivals being as yet more concerned about quantity, where shoddy has a larger sale than what will wear well. The American, as a rule, takes quick short views, and welcomes change for its own sake, as we are apt to cling to worn-out vestures and tools that have served us well in the past. Where he beats us is in the use of labour-saving machinery, that may be called the American art *par excellence*. Employers, always ready for experiment and improvement, never hesitate to scrap any machine for a new one that will do more work in less time; and their men do not look askance, like pig-headed British workers, on any contrivance to save labour and wages. For an American "hand" the surest road to promotion is the hitting upon some mechanical device through which handwork may be helped by a clever head. By ingenuity keenly fixed on every detail of his work, the man may soon rise to be a "boss", where master is a hateful word, then finds it to his interest to encourage employees of the same temper along the same road to advancement. Thus have been built up such gigantic concerns as the Baldwin Engine Works at Philadelphia, "the greatest in the world", where 13,000 men work night and day turning out 2000 locomotives a year, and the Westinghouse Electric Works near Pittsburg, with a branch at Manchester which seems the largest such undertaking in the United Kingdom.

Metal-mining and working appear the most characteristic industries of the States. One of the chief metaliferous regions lies about the head of Lake Superior. Here in the northern peninsula, which Michigan once grudged to take into her boundaries, so worthless land did it seem, lies enormous



Among the Copper Hills of Morenci, Arizona: a concentrating-plant

From one part or other of the United States comes the world's chief supply of this valuable metal

wealth of copper. The Calumet and Hecla mine, richer than any gold-field, has sunk into the ground the deepest hole below sea-level, in which interesting experiments have been made as to the revolution of the earth and the density and temperature of its crust. The heat has to be reduced by ventilation at the bottom, from which tons of ore are by steam power hoisted a straight mile upwards in a minute and a half. There are more roads underground than streets above, the homes of thousands of miners belonging to a score of nations, from Cornishmen to Chinese, among whom a few years ago there was but one born American to a hundred foreigners, but all their children are being "fused as in a melting-pot" into American citizenship.

This mine is reported a model in its management, and in care of its workpeople, who can earn from fifteen dollars a week all the year, while the shareholders have had their capital returned with forty-fold interest.

There are in Michigan a whole string of such copper towns, where tall red shafts make the chief sign of subterranean activity. Won from the bowels of the earth, the copper ore, as Mr. Ralph D. Paine tells us in his *Greater America*, is crushed by stamp-mills to something like coarse brown sugar, then carried on long trains to the smelting furnaces that purify it from dross in a heat more intense than the ordeal of Shadrach, Meshach, and Abednego, till the liquid metal can be set running out as a dazzling stream

of gold, played on by blue, crimson, and violet flames, to take mould as ingots cooled in water and picked up by the steel fingers of a machine, that, with a little human help, sends them off ready for loading on to cars. Thus a gang of half a dozen men have been able to turn out a million pounds of pure copper in a week's work. The western Montana is another great field of copper; and from one part or other of the United States comes the world's chief supply of this metal.

Copper-mining is a clean business, worked mainly in the bowels of the earth. The same cannot be said of iron-mines about Lake Superior, where the whole face of the country has been torn into a chaos of ruin. The soil proves so rich in ore that close below the surface it has simply to be ploughed up by huge steam shovels worked along rails laid down for them to dig out wide pits, in which these machines are seen "toiling like ants . . . taking five tons of ore at one bite and spitting it into the car beside them". Thus, in a day's work, a score of men can scoop out 10,000 tons, more than half iron, which, by clever devices of steam and electric machinery, are shipped on board a steamer in a couple of hours, and carried off to Pittsburg, or elsewhere, as a cargo of brown dust, to be smelted and forged into new machines for subjugating nature, into rail tracks, wires, or the frames of houses. It was at Pittsburg that Andrew Carnegie chiefly made the colossal fortune he spent so freely on both sides the Atlantic in benefactions that hardly sweeten the lot of grimy sweat and perilous toil from which so

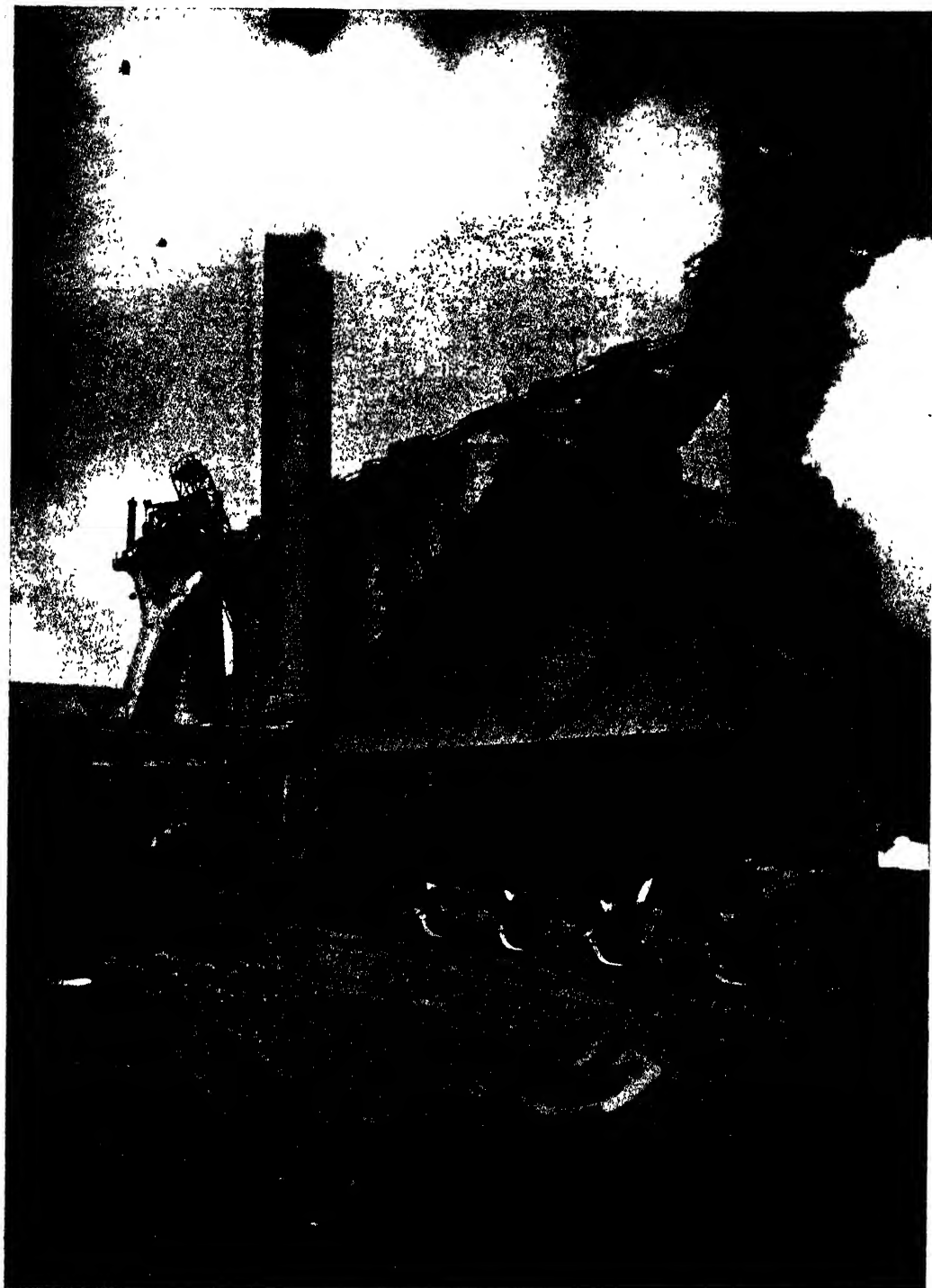
much wealth is wrung by the slave-driving of trusts and corporations wrestling with the often-violent revolts of labour unions.¹

Iron is found farther south, as in Alabama and Virginia, near the chief American coal-field, which extends along the west of the Alleghany Mountains. Coal is also got in the Mississippi valley, from Iowa downwards; but the largest working is in the northern part of the Alleghany field, where Western Pennsylvania and part of Ohio make the American Black Country, its *main d'œuvre* largely that of Italians, Slavs, Hungarians, Poles, and so forth, who, at cities like Pittsburg, huddle in slums almost as loathsome as those they left behind them across the Atlantic. Here are the abundant beds of anthracite, used in great cities instead of the smoky bituminous coal that befouls our fogs. In this region, also, are rich wells of petroleum, turned to account on the spot both for light and fuel. Some of its towns have been lighted from subterranean reservoirs of natural gas, hitherto largely used in manufacturing, but the supply seems not to be depended upon. Petroleum wells up in many parts of a country where to "strike oil" is a proverb for good luck; but the supply has been so carelessly or wastefully dealt with for an enormous demand that there are fears for it running short at no distant date.

Next to copper, iron, and coal, the mineral of nominally greatest returns has been silver, worked chiefly in the Rocky Mountain States, but the yield of late years appears to have fallen off as for a time did the value. Gold is profitably found in several parts,

¹ "Compared to the fearsome inferno (Pittsburg), I have just visited, Dusseldorf, Essen, Le Creusot, Rive de Gier, St. Chamond, are tranquil and perfumed countrysides, fresh and quiet spots where some long lazy pipes smoke into the blue air. Could you even lump them together and add the horrible Manchester, you would not succeed in producing the stupefaction that seized me when, on a grey winter morning, I ascended the twenty-first story of the highest house in the city, the Frick Building, and looked before me. Imagine a city of 350,000 inhabitants, vastly spread, where all the dwellings, all the public buildings, all the cathedrals, towers, obelisks and columns should be crowned by gigantic fixed crows vomiting to heaven smokes of every tint—a forest whose trees should be pipes plumed with floating wads, grey, yellow, red, light-coloured, blue

or black; a stretch of land, spread as far as the eye can reach under a double sky, one distant and fixed, scarcely visible through the density of far-spread vapours, the other close, always in motion and ceaselessly thickened by fresh clouds of cinders and dust saturated with oxides coming to meet and mingle aloft in the obscured air. . . . A noise of colossal forges mixed with the bells of the electric trams and the lugubrious groaning of trolley cars, metallic clangs, and gigantic sighs from chimney-stacks, ringing of bells, pantings of engines, rolling of wagons on the rails, squeakings and creakings of windlasses and cranes, a complete din of iron thrown in heaps, and of whistles, rises up from below, sounds at first to be caught separately, then, the ear growing used to them, they run together into the roar of a stormy sea."—Jules Huret, *De New York à la Nouvelle Orléans*.



Blast-furnaces at the American Iron and Steel Works, Pittsburgh

Underwood & Underwood

notably in California, where the first turning up of *placers*, or gravel deposits, is succeeded by more elaborate processes for wringing the metal from hidden recesses. Quicksilver occurs chiefly in California, just where it is most required in the extraction of gold. As in other parts of the world, it is very doubtful if gold and silver have paid directly for extracting; pig-iron is certainly a far more profitable possession were it not for excited rushes of hunting over regions that, but for their El Dorado repute, would have longer lain untilled. Even the hot deserts of Nevada keep a sprinkling of settlement, where millions worth of metals were snatched from beside its Funeral Range and Death Valley by adventurers whose lot was sometimes to perish in agony of thirst, sometimes to meet a violent death in lawless camps now fallen into silt and ruin, or dwindled like Virginia City from the days

when its famous Comstock silver lode yielded scores of million dollars to a prospector who ended by suicide. Nevada has been called a "graveyard of dead camps", that may revive through the irrigation of water, more precious than veins of gold and silver.

In some parts the country itself is scarred by elaborate gleaning after that first harvest. When placer miners had skimmed off the gold within reach of their devices, and even patient Chinamen no longer found it worth while to pry after rare specks, boring and hydraulic machinery was brought to bear for extracting the earth's hidden wealth; then tapping its veins is sometimes followed by scraping and squeezing its surface on a large scale. Dredger-mining, at first a failure, proved successful in one corner of California. The dredgers are huge, unsightly machines, built in a pond just deep enough



A Celebrated Mining Centre in the Western States: Leadville, Colorado

Gold, silver, lead, and zinc to the value of \$450,000,000 have been taken from the mines in this area since their foundation in 1859.



Chicago's Colossal Meat Trade: Government officials stamping the carcasses of pigs with the official seal of approval

to float them, which, as they push their way forward, lengthens into a canal filled up again by the rubbish heaps they throw out in their wake. Worked by electricity generated in the mountains, they slowly "chew up the landscape", as Mr. Paine puts it, "devouring earth and spitting out rocks", to be sifted and washed and have tiny flakes of gold coaxed out of the dirt by mercury. Such a devastating monster, with a crew of three men, can swallow and digest 5000 tons of earth a day, each ton containing perhaps a few pence worth of gold, enough to pay for making hideous havoc of orange groves and orchards, wrecked into mounds of barren stone from which their treasure has been sought out like a needle in a haystack.

Other metals widely distributed are lead and zinc. In more than one of the Western States a discovery of uranium is announced, from which may be extracted the radium

now a thousandfold more precious than gold. In short, hardly any metal is not found in some part or other of the United States, which have no want of all kinds of stone, from building material to gypsum, mica, and various gems such as sapphires, garnets, and topazes. Among what may be called by-products of nature are mineral waters, mineral phosphates, and mineral paints. The country is well supplied with salt from springs, mines, and the evaporation of shallow seas on its coasts.

The great Republic has another valuable asset in its forests, which, to be sure, have been so recklessly exploited that in some parts timber begins to run short, and from Canada is imported a proportion of the soft wood pulp used in many thousands of newspapers, the largest of which, for their daily issue, need a cutting and crushing of trees by the hundred. Now that the backwoods of the east have been cleared away

for towns and farms, the chief store of timber is the North-Western States, notably Washington, where mountains and valleys bear a thick crop of such trees as the noble Douglas fir, the red cedar, spruce, and other conifers, of which hundreds of thousands of acres must be stripped every year to pave the way of America's countless rails, not to speak of telegraph poles, houses, furniture, barrels, boxes, and firewood, that use up timber at two or three times the rate of its regrowth. In this corner of the continent, a whole army of "lumber-jacks" are always at work, their labours also speeded by machinery. A rough rail is laid through the forest, in the heart of which a donkey-engine moored stoutly to strong trees, pays out a long wire cable that, when hooked and slung to a log as thick as a man's height, can haul it up through thick and thin, a bold rider on its back to steer it past all obstacles, till it comes bounding and smashing up to the track, to be hoisted by a dwarf Hercules of steam on to a car, after being felled and sawed up perhaps a quarter of a mile away. By such contrivances the heart is torn out of the primeval woods, smaller trees being left to burn or rot as not worth so much pains. But the generations of forest giants are slower in growth than American demands for wood, and the Government has now seriously to consider a prospective shortage, as it does by promoting the science of forestry and by marking out reserves of timber kept free from the lumberers' wasteful and wasteful industry. By some States has been appointed an April *Arbor Day*, when every good citizen is expected to plant a tree for the benefit of posterity.

The early settlers could not clear away the forests too fast, to make openings for their crops. A great part of this busy population lives by the land, which not only feeds them but supplies a surplus to the wants of over-peopled Europe, notably in the carcasses preserved and packed by ingenious contrivances. The United States contain six or seven millions of farms, as a rule cultivated by their owners, the renting of land being common only in the South and some parts of the West. This distribution gives

to the "agricultural interest" a strength shown in the Granger movement, that began about half a century ago, and has since been restirred afresh under different names. The "Grange" that has played such a part in American politics, was a league of Western farmers to oppose high tariffs and exorbitant railway rates for the transport of their produce. Soon numbering nearly a million members, this body was able to command State-fostering for their industry and to control freight charges by law; then it extended its operations to co-operative buying and selling, to introduction of the labour-saving machinery so valuable in a new country whose hands are few, and to setting up the elevator stations in which a farmer's crop of grain may be stored and in due time spouted out for transport to distant markets by rail or water. Under a wideawake Agricultural Department at Washington, every State concerns itself with making the best of its soil; and the sale of new lands as public property provides funds for assisting their cultivators. There are numerous Agricultural Colleges for teaching students a smattering of the sciences that bear upon farming, while exercising them in the practical methods recommended by Mr. Squeers. In the dry regions of the West, where land was worthless without water, irrigation, under charge of the Government, is fast extending the area of tillage and the scope of experiments.

The first raising of rich crops from a virgin soil, an enterprise that leaves the cultivator idle for part of the year, soon becomes supplemented by mixed farming, in which dairy produce, poultry, and vegetables yield further profit. Thus farms go on encroaching on the vast grassy plains where millions of cattle fed after the extinct buffalo herds. Enormous were the ranges on which at first huge fortunes were made by "cattle kings", who, from Texas, pushed northwards to Montana through the central region of mountain and plain. But now these open pastures become cramped within barbed-wire fences; the "cow-puncher", who replaced the Spanish *ranchero*, has to share land and water with the farmer; the small rancher gets

a chance to neighbour the big one; then the picturesque lawlessness of Western life dies out when adolescent States forbid the carrying of arms at any public gathering, and fences restrain the cow-boy as machinery weighs upon the miner's early recklessness. Mr. E. Hough (*The Story of the Cow-Boy*) describes a now moribund phase of American life in the motley population of one of the little "cow towns" that sprang up so quickly in the West, to be so often "painted red" by the holiday visits of their best customers, such as also figure in popular tales like those of O. Henry.

"It is a womanless society for the most part, hence with some added virtues and lost vices, as well as with certain inversions of that phase. The inhabitants might be cow-boys, half-breeds, gamblers, teamsters, hunters, freighters, small store-keepers, petty officials, dissipated professional men. The town was simply an eddy in the troubled stream of Western immigration, and it caught the odd bits of drift-wood and wreck—the flotsam and jetsam of a chaotic flood. . . . One of the prominent citizens of such a town was a gambler, a farmer, a fighter, and a school-teacher all in one. One of the leaders of the rustlers and cattle-thieves who made a little cow town their headquarters was a Methodist minister. It was not unusual for a justice of the peace to be a barber."

The notable industry of the Western plains is still the rearing of cattle, to be driven or carried by rail to slaughtering centres like Chicago. If the tinned tongues that have often appeared on our tables could speak, what tales they might tell of scowling Indians overawed by the masterful strangers who pushed them from their



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"Where Cotton is King": gathering the crop on a Louisiana plantation

hunting-grounds of wild "cow-boys", daring to a fault, leading on lonely ranches the lives of hard-worked hermits, unless when once in a while they galloped off to fling away their earnings in riotous folly at the nearest townlet—of exciting feats of horsemanship at a branding or a mustering of half-wild cattle—of feuds between cattle-men and sheep-men, when they began to crowd each other on choice spots of the Western solitudes! Sheep are accused of destroying the pasturage, and

The World of To-day

of being intruders in the West, where they run mainly to mutton, while in the older parts more attention is paid to breeding with regard to their wool. "Hogs" are "raised" all over the States, but appear to be most abundant on the northern Mississippi prairies, where dairy-farming flourishes. A less prosaic export than pork, alike sent to us in tins, is the salmon that swarm in the north-western rivers, where the ghost of Izaak Walton would shudder to see how fish are scooped out by means of nets revolving on wheels, at the rate of thousands of pounds in a single night. Sea-fish and oysters are also among the exports of the coast States, along with the products of the whale and fur fisheries.

Maize, here known as "corn", is the chief crop of the States, not much of which goes abroad unless in such preparations as hominy, or in the indirect form of beef and pork fattened on it; but in various ways it enters largely into the food of the people. The same may be said of oats, largely grown in America, which has some smaller crops little known to us, such as buckwheat, here used for cakes, but in England for feeding pheasants. The grain most exported is wheat, grown chiefly in the Northern Central States and in California. Another most valuable product is the cotton of the South, so important to us that a "cotton corner", carried out by greedy speculation, may spread semi-starvation over a great part of Lancashire. Its cultivation has extended widely to the west of the Mississippi over Texas and adjacent States. The cotton seed, once wasted, is now used for a valuable yield of oil. California does the largest business in fruit; oranges, lemons, and pineapples being also grown in Florida and other parts of the South, at the disadvantage of occasional frost snaps. The cultivation of vines, with the making of wine, has been pushed chiefly in California: it remains to be seen how far this may be blighted by prohibition. A wider area supplies that modern luxury, tobacco, the "sot-weed" that was an important export of the infant colonies. Another original

product of America, the potato, has, of course, long ago spread over Europe, though often received at its first introduction with strange unwillingness. The South produces sweet-potatoes, sugar, and rice. All the States raise for themselves most of our familiar fruits and vegetables, along with some not naturalized across the Atlantic, and some known with a difference, as the cranberry, which here grows on a tree to the size of a small cherry. The apples of America and Canada are among their most welcome exports to this country.

Most of the farm-holdings are small, the largest proportion being as yet under 100 acres; and the majority of them are worked by their owners, a class once more numerous. In the newly-opened districts, quarter-sections of 160 acres, or sometimes more, are granted on easy conditions to homestead settlers, who acquire property in them by occupation and improvement. This division of small properties tends to diffuse well-being and to make a guarantee of national stability. There are vast waste spaces to be reclaimed, and much land that might be forced to greater productiveness by more thorough husbandry, the cultivated area ranging from less than a hundredth part in the Wild West to three-quarters in the agricultural region of the Central North. So the States still offer fields in which a poor man may hope to win a living, and a clever or lucky man to make a fortune, while only in the rawer western regions is land now to be had free. It is there also that cattle-ranges may still be of vast extent, like that of one "land-kings" who, having come a penniless youth from Württemberg, was lately proclaimed as owning an estate twice the area of his native country, with an income of millions to keep up the rank of largest landowner in the world. As in Canada, American "enterprise" is much concerned with gambling in land values; and a stranger, looking for a home here, must keep his eyes more open than did Martin Chuzzlewit.

As yet this great Republic has been justified in crowing over her success and her promise of still brighter prospects. But there are



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The First Glimpse of the "Promised Land": emigrant children hailing the marvels of New York's sky-line

clouds, too, on her horizon which hint that the sun may not always shine in the west. With the general run of prosperity has gone on a rapid accumulation of enormous fortunes, that seem to threaten republican simplicity and the health of the common weal. The multi-millionaires and unscrupulous speculators who here take the place of an ancient aristocracy are not loved by the masses; and a sign of the times is the sullen antagonism of capital and labour that breaks out in obstinate strikes, attended by almost insurrectionary scenes of violence. This danger seems bound to increase, as the country goes on being filled up till it feels such a pressure on its elasticity as will engender more and more the problems that afflict old countries. Any collapse of enterprise, after inflated speculation, causes widespread distress: and President Roosevelt,

while still in office, ventured to remind his countrymen how impoverished fields, worked-out minerals, and wasted forests might some day try the self-confidence of a people whose natural resources are not unlimited. Already the great American cities breed slums of crime and misery, "Ghettos" and "Little Italies", populated by Gibeonites worse off than the ex-slaves; and that in a country where custom has not schooled the unfortunate to suffer in silent despair, where Lazarus is taught to hold himself as good as Dives, and where extreme wealth and poverty stand out in sharp contrast upon a background of general comfort. The ostentation of sudden wealth, and the tyranny of the financial juntas called trusts, might well exasperate sober-minded workers; then the hands of industry here are now to a large extent hot-

headed foreigners driven from their birth-land by grinding poverty or oppression, unripe for free citizenship, and easily led by fanatical or crafty agitators, with whom work honest foes of plutocracy, as well as a prolific breed of "cranks" such as excited Roosevelt's practical mind to scorn "the silly, half-educated people, and the educated able people with a moral or mental twist, who in almost every European country have found notoriety or excitement in fomenting revolutionary movements which they were utterly powerless to direct or control".

The hints at the end of the last chapter, as to adulteration of this stock, may be enlarged on consideration of its industries as machinery worked at high pressure, in late years more and more by a proletariat that might have replaced black slavery were it not quicker to learn the rights than the duties of its new nationality. In the year before the War foreign immigration had reached its climax in a tale of some 1,200,000 recruits for the Republic. Nearly half of these were serfs of the now-ruined Eastern European empires, about a quarter being of Latin race, and little more than a tenth Teutons, Scandinavians, and Anglo-Saxons, once the most numerous and promising element for absorption. Most of those raw citizens, without capital or enterprise, would drift into the ranks of wage-earners, readily manning the factories, which, in early days, were worked chiefly by ill-paid women and children. The Puritan Fathers of Milton's time might indeed stare and gasp could they see the hands of a New England factory through the eyes of the American novelist, Mr. Winston Churchill. "Here, going home to their children, were Italian mothers, bred through centuries to endurance and patience; sallow Jewesses, gaunt bearded Jews with shadowy, half-closed eyes and wrinkled brows, broad-faced Lithuanians, flat-headed Russians; swarthy Italian men, and pale, blond Germans mingled with muddy Syrians and non-descript Canadians."

The excitement of the War, the rise in prices, the example of European commotions and the general stir of American life, set gangs of these aliens conspiring to bring about congenial anarchy. Such unwelcome propagandists Uncle Sam dealt with drastically, arresting the "Red" zealots by hundreds to be shipped back to their native spawning beds. Their abuse of the Republic's hospitality put the Legislature upon a measure for temporarily closing an asylum open to the victims of European tyranny; then Labour and Capital seemed for the nonce willing jointly to endorse a restriction that would at once keep up wages and protect industrial enterprise.

For long, of course, the ports had been closed to undesirable foreigners, new arrivals being filtered through such social quarantine stations as New York's Ellis Island, while, indeed, some contrived to smuggle themselves over the Canadian borders. But an inferior class of citizens, once admitted, prove extraordinarily prolific, while the native strain of Americans do not propagate their qualities at the same rate, and notably New Englanders, once the brain and sinew of the nation, seem in danger of dying out. Thus there arises a question whether the process of absorption, the lower by the higher, may not be reversed. The fortunes of the South American republics, with Constitutions borrowed from the model of the United States, mainly depend on whether their new citizens will raise the standard of life, or let themselves be drawn down into the sluggishness and carelessness of the natives. In North America, on the contrary, some thoughtful observers begin to fear that the new-comers may prove a demoralizing agency, while others dwell on the hopeful view that a mingling of blood makes for vigour and intelligence. It is at least doubtful if the great Republic's wheels will run smoothly should it suffer deterioration of the good sense, good principle, and good temper which have made the Anglo-Saxon race fit for self-government.

MEXICO

This most distressful country belongs geographically to North America; while by its ethnographical and by some of its physical characteristics it seems more closely allied to the southern half of the continent. What the Spanish conquerors admiringly christened New Spain was the richest and most famous of the vice-royalties founded by them, which, even as now restricted, makes the most considerable of Spain's ex-dependencies, among them surpassed in size only by the more thinly-populated Argentine Republic. In shape it has been compared to a cornucopia, broadening out from south to north. It is joined to Central America by the isthmus of Tehuantepec, rather more than 100 miles broad, low on the Atlantic side, but on the Pacific coast rising in a chain of inconsiderable mountains. North of the isthmus, this chain becomes more elevated and opens out into two main mountain ranges, the Sierra Madre Oriental and the Sierra Madre Occidental, that on the east and the west sides enclose a great table-land, broken by deep fissures and hollows, with a general height of between 7000 and 8000 feet. The main bulk of the country is this Mexican or Anahuac Plateau, to which the land rises in terraces from the south, falling again on the north side to about 3000 feet at the United States border-line. On the west the mountain rim is 10,000 to 12,000 feet high, and often magnificent in its features; on the other side it seems rather an edge of the plateau sinking to the Gulf of Mexico.

The highest summits are those of a line of volcanoes thrown up across the best-known part on the south of the table-land.

There is some difference of calculation as to the height of these, but more than one of them overtops any North American mountain, except those recently come to knowledge in the far north-west. Orizaba or Citlaltepētēl, looking over the Atlantic side, has lately been measured as 18,200 feet. Almost equal in height, hitherto looked on as higher, is Popocatepētēl, "hill that smokes", whose scorched and torn crater, encrusted by snow and huge icicles, excited the awe of the early conquerors, and has been recently suspected of fresh eruptiveness, after sleeping through two centuries. Beside this rises Ixtaccihuatl, "the White Woman", wife of its fearsome neighbour according to Indian superstition, and both of them regarded as gods, whose ancient names suffer irreverent contraction as "Popo" and "Ixy" in Anglo-Saxon mouths. There are several other volcanoes as high as our Alps. On the west side is the small one, Jorullo, renowned as having arisen suddenly in the middle of the eighteenth century, swelling up like a blister from the sick earth, that around it broke into a scab of smoking pimples thick as haycocks, called by the people *hornitos*, "little ovens", in our time for the most part smouldered out, many of them sunk in or washed away by heavy rains.

This country, lying half in the tropics, has, through its different altitudes, a three-fold climate, with consequent diversity of animal and vegetable life, over a region as long as from Iceland to Cadiz, and seven times as large as Italy, where every 5000 feet of height equals about 1000 miles of latitude in change of temperature. The coast chiefly and the low-lying south makes

the unhealthy *tierra caliente* or hot zone. At the height of a British mountain comes what is here called the *tierra templada*, with a sub-tropical warmth varying only a few degrees between the dry winter and the rainy summer. Then above 7000 feet lies the *tierra fria*, which to us would be the true temperate zone, since, excluding the uninhabited mountain tops, its mean annual range is above that of our most genial winter resorts, and it is warmer in winter, cooler in summer, than most parts of the United States.

It appears that, through destruction of the forests or other causes, the Mexican climate is on the whole growing cooler and drier. Mexico suffers in parts, and sometimes generally, from a deficiency of rainfall, causing disastrous droughts; the eastern side has the chief benefit of a wet season in summer. Most of the rivers are inconsiderable; many of them intermittent. Only short, rapid ones, useless for navigation, pour down to the coast from outside the two mountain ranges. The inner streams of the plateau often run out in closed lake basins or salt marshes, the principal of those that reach the sea being the Mexcala on the west and the Panuco on the east side. The longest watercourse of the Republic is the Río Grande del Norte, or Río Bravo ("wild river"), which for hundreds of miles forms its north-east frontier with the United States. There is a deficiency of good harbours. The rugged Pacific coast, indeed, has some picturesquely-sheltered openings for hot and unhealthy ports. On the Mexican Gulf, where the flat shore is for long stretches lost in shallow lagoons shut in by dunes and sandspits, havens at once safe and accessible have hardly been gained without great expense.

To the north, Spanish dominion once extended vaguely far over the west side of the greater Republic, where names and relics of Spanish settlement are still found scattered through Uncle Sam's go-ahead invasion. As cut down by various amputations, mainly by the war of 1846-8, Mexico's territory is now bounded on this side by the States of Texas, New Mexico, Arizona, and California. She keeps the

long peninsular point of Lower California, with the islands enclosed in its gulf and others in the open ocean. Another excrescence, across the Gulf of Mexico, is the Yucatan promontory. Her present area makes about 750,000 square miles, three times more than any European country except Russia. The population was counted in 1910 at 15 millions, the largest of any of the Latin colonies except Brazil. This is composed of a white minority, and half-castes in rather larger proportion than the Indians of different stocks. It included before the recent troubles some 100,000 foreigners, the largest contingent of them, naturally, from the United States, with increasing bodies all the way from China and Japan. The country was divided into twenty-seven States and two Territories, having a Federal Government of President and double legislative body on the American model. For two generations its history had been the usual Spanish-American struggle between anarchy and tyranny; but towards the end of last century, under the government of one master who might have delighted Carlyle, the nation took hopeful steps towards peacefully progressive development, sorely disappointed in our time.

Our generation has so much to read that it is less familiar than its fathers with the marvellous story of Hernán Cortés, as told by Prescott and other writers, who are now suspected of having been led into some exaggeration of the Aztecs' power and riches. This people, apparently from the north, had by their war-like qualities, and use of the bow and arrow, become dominant over former invaders or aborigines, Toltecs, Mayas, Mixtecs, Zapotecs, or others. Like the barbarians that overran Rome's empire, the conquering Aztecs here absorbed a prehistoric civilization and religion that have left many monuments in overgrown pyramid temples, in palace walls sculptured with hieroglyphic records, in the contents of tombs whose inmates were piously provided with the implements of earthly life, even to quern-stones for grinding their daily bread in the world of shadows. We must leave it to archaeologists to pore over a puzzling



A Mexican Highway: on the road to Puebla

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In the distance is the summit of the mighty Popocatepetl

history that reads like snatches of a fairy tale, with its avatar of Quetzalcoatl and its golden age of Nezahualcoyotl. The very spelling of these old Mexican names will be repellant to the general reader, who for picture-books from the ruins of this past must be referred to more elaborate works. Enough for him to understand that it was no savage State into which, early in the sixteenth century, a Spanish ex-swineherd burst with his band of *Conquistadores*.

On a chain of lakes in the Valley of Mexico stood the capital of Montezuma, the Aztec prince ruling over his own people and subject nations, the latter easily drawn to aid the god-like invaders whose coming, with their wondrous horses and fatal thunder, is said to have been predicted, no doubt from rumours of Spanish conquest in the West Indian Islands. The Aztecs had

grown to be a superior people, making use of picture-writing, bridling their watery seat with dykes, drains, and causeways, amid which they built imposing palaces and temples, and made floating gardens of earth piled on rafts. One blot, in what seems otherwise a high state of culture, was their practice of human sacrifices, hundreds of victims taken in war being slain on the top of their temples and the reeking hearts held up as offering to the sun. Their "Emperor", surrounded by guards and courtiers, went sumptuously arrayed in feathers, gold, and jewels; but he was no man of war. He appears to have had a premonition of his downfall from the first news of Cortes' landing at Vera Cruz, to whom he sent rich gifts that tempted on those greedy conquerors, in spite of Montezuma's repeated appeals to them to turn back.

The World of To-day

Cortes led his few hundred men over the mountains, first attacking, then making faithful allies of the Tlaxallan people on his way. Famous are the scenes of his approach to the city, his meeting with the overawed Montezuma, and his entry through the silent streets. The strangers were lodged in a spacious palace, where presently Cortes confined the emperor as a hostage, and, scandalized by the sacrifices of the native temples, lost no time in preaching to him the religion in whose name thousands were being burned and tortured at the hands of the Inquisition. For a time the population remained sullenly submissive; but when the leader left for Vera Cruz to deal with enemies among his own countrymen, the arrogance of his lieutenant stirred up a revolt. Cortes returned to find the Spanish band besieged in their fortress quarters. In a riotous attack the captive Montezuma, brought out to command peace, was fatally wounded by an arrow shot from among his own subjects; and legend has it that they dashed his corpse to pieces.

This movement grew so perilous that the Spaniards had to cut their way out of the city with heavy loss. The mouldering tree is still shown under which Cortes passed a *Noche triste* of despair. But he soon rallied his courage and his forces. In a hard-contested battle the Mexicans were defeated; then after a long siege their city was retaken and half destroyed by the captors, a storm, it is said, coming to complete the ruin. The emperor's heir surrendered to Cortes, who assumed authority as captain-general in the name of his king. His acts on the whole compare favourably with Pizarro's ruthlessness; but he disgraced himself by torturing that royal prisoner in the vain hope of making him give up supposed treasures; then before long the last Aztec prince was hanged on pretext of conspiracy. Too late, the Spaniards' Indian allies found how they had changed masters for the worse; and with the wonders of the New World the smallpox appeared among them, working far greater havoc than shot and steel.

Cortes having finally returned to Spain, to die neglected by the king for whom he

had won such a prize, the country settled down under the regime of viceroys, *audiencias*, and prelates sent out from Spain with instructions to treat the natives considerately. The next generation saw Mexico organized as a submissive Spanish dependency, and for nearly three centuries more her history was a monotonous one. Viceroys went and came, over three score of them, too often changed by court favour, keeping their places by bribery, or not seldom promoted to the government of Peru, whose mines then made this a richer possession. The Indians were Christianized after a fashion; the Inquisition was transplanted to the ground stained by Montezuma's sacrifices; the Spaniards became a ruling caste, shading off into the subject majority. Beyond jealousies between the privileged class and their mongrel offshoots, sometimes exasperated into riotous outbursts, the chief grievances of the people were heavy taxes, and forced labour in the mines sending tribute to the degenerate Spanish monarchy. But, when Humboldt visited Mexico in the beginning of last century, he found its capital in a flourishing state as compared with the colonies of the Spanish Main, and everywhere the bell of the mission tinkling over *cañon* and *monte*, in sign of a peace seldom disturbed unless by the roar of the thunder and the crash of the earthquake, or on wild borders exposed, till our own day, to attacks from unsubdued Indian warriors.

This slumbrous civilization was broken by the War of Independence; then, for seventy years Mexico hardly knew peace. A priest named Hidalgo was first to raise the standard of rebellion, not the only ecclesiastic who took a leading part in those early troubles, though the power of the Church was exercised rather against the popular aspirations. Hidalgo came to be captured and shot, as was the fate of Morelos, also a priest, last victim of the Inquisition. The cause of liberty seemed lost when, in 1820, the royalist general, Yturbe, changed sides, pronounced for independence, and got himself made first president, then emperor under the title of Augustin I. His reign

was brief; he left the country, but returned, to be shot. Now rose Santa Anna, whose name for nearly half a century figured in subsequent revolutions when, as an eye-witness says, kings, castles, knights, and bishops made their moves, while the pawns looked on and took small part in the game. This wooden-legged hero, crippled thus in a short war with France, has been compared to a jack-in-the-box, so oddly does his name keep popping up among the welter of Mexican politics, now in power, now in exile, now making presidents, now holding the reins of office. His fame dwindled with the war of 1846, when Texas furnished the bone of contention, which, having first set up as an independent republic, came to be adopted into the United States. The livery question was also at issue; and a strong party in New England and elsewhere denounced the Mexican War as iniquitous, the author of *The Biglow Papers* being their loudest spokesman, while General Grant, who fought in it as a subaltern, lived to call this war one of the most unjust ever waged by a strong against a weak nation. Victory went, if not to the bigger, to the better-disciplined battalions; the decisive battle of Molino El Rey was won outside the capital; and in 1848 Mexico found herself forced to resign those thinly-settled provinces that are now the Western States of the greater Republic.

Next came the period of foreign inter-

vention. The troubles of Mexico had brought up the question of sequestrating Church property. Juarez, a full-blooded Indian, came to the front as liberal leader.



Underwood & Underwood

Tree of the *Noche triste*, Mexico City, beneath which Cortes passed a "sad night" of despair

During the long series of civil wars, brigandage and crimes of violence had naturally grown frequent. France, Britain, and Spain made a joint demonstration on behalf of their subjects in the distracted country. The two latter Powers soon withdrew from the enterprise; but France kept a footing in Mexico, and Napoleon III conceived the

unhappy idea of quieting this turbulent republic under a European prince. A ready-made emperor was found in the Austrian Archduke Maximilian, a well-meaning man, but full of exalted ideas of the right divine born in Hapsburgs and such like. Planted in his new capital behind a hedge of French bayonets, for a time this exotic sovereign seemed to take root, with ultra-clerical sympathies and weariness of anarchy to water his authority. But Juarez held out against Bazaine and 40,000 Frenchmen, the main strength of Maximilian's army. His imperial crown was still an uneasy wear when the end of the Secession struggle between North and South left the United States free to enforce a strongly-worded protest against his intrusion. Not daring to risk war with such a Power for the sake of an expedition highly unpopular in France, Louis Napoleon had to withdraw his army from Mexico. In vain the poor empress hastened to Europe to implore him with misery that ended in madness. When Maximilian knew himself abandoned, his first thought was to abdicate; then he chivalrously determined not to desert his partisans. But his native army of a few thousand men soon broke up before the forces of Juarez, to whom, in 1867, the emperor surrendered, and was shot, the frequent fate of Mexican ambition.

Juarez died in power a few years later, with two of his lieutenants in revolt against him, one of them Porfirio Diaz, who, in 1877, became President, as result of a fresh uprising, but was replaced for the next term of office by Gonzalez, to whom, in 1884, Diaz again succeeded, peacefully and legally almost for the first time in Mexican history. Then, after its long story of foreign government, of native revolutions, and various usurpations, the so-called republic was for a generation controlled by a practical dictator, under whom, by all accounts, it made remarkable progress. Though not of pure white blood, Porfirio Diaz, errand-boy, lawyer, sugar-maker, and soldier in dozens of battles, was able to justify his repeated election to supreme authority. Living down opposition engendered in

the old days of violence, and purging them, it has been calculated, by the execution of more than 10,000 opponents, he brought order into the finances of the country, developed its resources, covered it with railways, roads, harbours, and other public works, encouraged foreign enterprise, and secured a better administration of justice. By good fortune, by craft and unscrupulous violence, according to his enemies, or, as his friends assert, by virtue and force of character, he proved under republican forms the most masterful ruler fallen to the lot of any modern republic, and was hailed at home and abroad as regenerator of his country. He specially won the applause of foreign investors, for whose capital he offered safeguards, and of some foreign visitors, on whom he passed off a veneer of progress for a change of national temper.

But Diaz was, as Mr. Hamilton Fyfe says, a great policeman rather than a great statesman; he kept order but did not foster public spirit. The very agencies of civilization he promoted went to weaken his regime. Land and wealth came more into the hands of the few, while the many fell into discontented dependence. A middle class began to spring up, whose superficial education was not proof against crude Socialistic teachings and comparisons with the real democracy of their neighbours in the States. It seemed as if Diaz might have founded a dynasty, had he had a worthy heir, yet his almost arbitrary power was being secretly undermined, while, too confident in a quarter of a century's autocracy, he did not keep up the numbers and efficiency of the army. When his career was drawing to an end in the course of nature, and already men were asking apprehensively who could be his successor, a revolution broke out against him that gathered head in the summer of 1911. Unstrung by age and illness, Diaz bent before the storm, resigning his authority and escaping to Europe.

The leader of the movement was Francisco Madero, rich, of good family, and full of the modern spirit that now burst the old bottles of Mexican government. This



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The Palace of Chapultepec, near Mexico City

The present building occupies the site of Montezuma's palace. Here lived President Diaz, and here, at one period of his stormy career, Huerta took refuge from "a sea of troubles".

Brutus seems to have been a genuine lover of liberty, but an unpractical dreamer, not to say a quixotic crank, who, as Chief of the State, was readier with fine words than with vigorous deeds, and took for his principle trusting a people not to be trusted. He appears to have lost his head when soon a counter-revolution broke out against him, engineered by General Felix Diaz, the nephew, and General Reyes, who had been looked on as an understudy of the late president. For ten days fighting went on in the streets of the capital, thousands of the inhabitants being massacred. Madero and his vice-president, fallen into the hands of their enemies, were killed in the confusion, murdered purposely or shot in an attempt to escape. Reyes, also, was among the victims of those tragic scenes. Felix Diaz showing no eagerness to snatch at power, out of the welter emerged General Huerta, a rough

soldier of Indian blood, who had served Madero against troops of robbers dignified as rebels, and now undertook the part of a Mexican Cromwell. He had no difficulty in getting himself elected president, "elections" in Mexico being usually done by the strong hand, and when Congress did not show sufficient deference, he played the dictator by dismissing it, with a hundred of its members sent to prison.

Against him, in turn, rose up General Carranza, as champion of a Constitutional party that spread rebellion in the northern provinces, Huerta seizing the capital as head of the so-called Federalists; but more than once it fell into the hands of other ambitious "generals". A fierce civil war went on for a time without decisive result, while railways were wrecked, property was destroyed, and foreign residents went in danger of their lives at the hands of troops often no better

than bandits. The rebels, so long as they could pay them by plunder or exactions, easily enlisted soldiers among the Indians, who welcome the excitement of campaigning but do not fight with much resolution. The Government made forced levies of troops, pressing gangs of criminals into service. Both parties had to depend on chiefly untrained officers. Such raw soldiery did not do much execution in battle, but both sides disgraced themselves by cruel executions of prisoners, that inflamed the fitful contest. President Wilson, for the United States, refused to recognize Huerta, but failed to interfere forcibly in the distraction, as he was loudly called on to do by Americans having interests in Mexico. American troops lay encamped beside the border river, on the other side of which hot fighting went on before the eyes of excited spectators; and once a force was landed at Vera Cruz to demand satisfaction for an insult to the American flag. This quarrel being smoothed over, the United States Government fell back on its policy of letting the combatants wear themselves out in their own cockpit, free from intervention which might land Uncle Sam in the management of a country unable to manage itself.

Huerta, soon losing popularity, for a time held his power by force of arms, but died after being driven from the capital by Carranza. Next the rebel leaders fell out among themselves, Carranza, Villa, and Zapata being proclaimed presidents in different parts of Mexico, where most people with anything to lose, and all the foreign residents, had long been sighing for any autocrat strong enough to restore order.

It seems hardly worth while to note all the vicissitudes of a confused civil war, which brought repeated changes of government, some lasting only for a few weeks or days. The capital was temporarily seized and terrorized by one aspirant to power after another. In 1915 Carranza seemed to have won such a predominance that he was recognized as *de facto* chief by the United States and the South American republics. But the precarious authority he held since then was all along defied by "generals" who

should rather be styled bandit chiefs, notably the Indian ex-cowboy Zapata and the ex-goatherd Villa, who is said to have shown himself a skilful soldier in excursions from his northern mountain fastnesses. All these leaders vied with each other in plundering the country, in executions and massacres, and in outrages upon the persons and property of foreign residents, as on their own well-to-do countrymen, who, by tens of thousands, sought refuge across the United States border. So Mexico became the scene of such tragic misery as was to be re-enacted on the stage of Soviet Russia, and will result elsewhere from farcical attempts to mimic free institutions among people incapable of self-government.

Britain and France, even had their hands not been full elsewhere, held aloof from any meddling that might infringe upon the Monroe doctrine. Germany added to the confusion by obscure intrigues apparently designed to draw away Uncle Sam's eyes from the European conflict. The great American republic, with its chief interest at stake, was loudly called on for interference with a would-be potentate who aimed at preserving for his own country the yield of its oil-wells and mines worked by foreign enterprise. But President Wilson scrupled to dictate for a harassed neighbour, and took the view that Americans trusted themselves and their capital in Mexico at their own risk. Border disturbances and raids pushed on to American soil by Villa's reckless followers forced him into action by military demonstrations across the Mexican frontier, too feebly sustained to intimidate the brigand bands, when the excitement of a greater struggle dulled America's sensitiveness to the pricks of that irritating neighbour.

In 1920, the simmering spirit of revolt boiled up into a formidable attack on Carranza's Government. General Obregon took Mexico City, driving out the President and his myrmidons after they had cruelly wreaked their wrath on imprisoned opponents. The fugitive Carranza was captured for the common fate of Mexican tyrants: the official story is that he committed

suicide. Obregon, a new figure in the chronic disturbances, did not at first put himself forward, but procured or allowed the election of General Huerta as provisional President, second of that name; then, later in the year, Obregon became head of the State. This Government started under promising auspices, the people seeming at last to be sick of continual commotion. Progress had already been made in restoring the wrecked railways, which, as well as plundered Church property, Huerta undertook to give back to their owners; while, seeking to cultivate the goodwill of the United States, he offered professions favourable to the foreign investors whose interests had been threatened by Carranza. But the new President had not long seated himself in office before there were rumours of fresh risings, as to the exaggeration or belittling of which it is difficult for us to judge. This much

we may guess, that a country torn by such rankling discords and such shameful crimes will not at once settle down into peaceful respect for law and order, guarded by a prudence, an instruction, and a public spirit so much to seek among this quarrelsome people. Perhaps the safest forecast is that Mexico may be set on its legs again by the strong hand of Uncle Sam, giving himself a mandate for at least such a semi-protectorate as has been tried for its neighbour on the farther side, Nicaragua. Else Britain also should have a word to say as to a rescue from Kilkenny cat-like destruction, since her investments here, though less than those of America, are reckoned at some £200,000,000; and nearly a hundred of her subjects have been killed or seriously injured in the recent massacring onslaughts that seem hardly to deserve the title of revolutions.

PEOPLE AND PRODUCTS

The main wealth of a nation is in itself; and the Mexican people is not yet all it might be. They still have too much of the Hispano-American inertness, especially in the hot lowlands, while on the plateau they may be more ready to stir themselves for a living. They appear much too fond of gambling, of lotteries, of cock-fighting, and of bull-fighting, tolerated here when put down in the most progressive of the South American republics; it was, indeed, stopped in the Mexican capital. Crimes of violence are so common with this hot blood, that most of the jail-birds, under orderly rule, seemed to have got into trouble through use of the knife. Too many should have been in prison as arrant thieves. The open brigandage that cursed the country in old days of civil discord Diaz put down by heroic measures, those of the robbers who were not shot with short shrift having been enlisted as *Rurales*, guardians of order; then the late civil wars again turned gendarmes into bandits. The half-tamed Indians often appear more manly than the mongrel mass of popu-

lation, whose strong point is a politeness of manners and bearing, despised by the Saxon intruders, whose own bluntly rough and pushing ways are so uncongenial to this nation. The haughty Spaniard, also, in his own way shows contempt for the masses, who, below an air of servile submission, often hide resentment expressed in murders, as was found by many hard masters, native and foreign, in the late upsetting.

For a quarter of a century, the Government showed itself resolute to raise the red-white-and-green tricolour of Mexico as a standard of civilization. Besides model prisons, President Diaz was concerned to establish schools of all kinds, and to make elementary education compulsory; it seems a pregnant fact that in all higher schools English was taught, which became the language of Mexican railways. If it be true that he purified the public service, he indeed cleaned out an Augean stable. A special Ministry of Encouragement (*Fomento*) fostered industry and colonization. The Church, which once absorbed so much of the

national power and wealth to produce such a poor tale of piety, has been severely dealt with, its monasteries repressed, many of its superfluous buildings alienated to lay uses, its public processions put down, and even a distinctive dress forbidden for ecclesiastics, as a certain English bishop found to his amazement. This wind of oppression, however, should be tempered to the shorn shepherds, as to their flocks, by a higher tone of religion that in the end may give the Church more power to elevate the people, now that all religions are put on an equal footing. For elevating influences, the Government of Diaz looked rather to education, to the spread of practical welfare, and to the example of the *gringos* (foreigners), who bring capital and enterprise among the race nicknamed "greasers" by their more stirring neighbours. But it is possible that one of the pretenders to authority might find his account in alliance with the clericalism that still has much influence over the ignorant or superficially schooled masses. Carranza, for his part, accentuated the dominant secularism by outrages on the Church's property and ministers, nuns being frequently the victims of his half-savage myrmidons.

Mexico's natural resources are very great, as might be expected of a country with such varieties of height over nearly a score degrees of latitude, where almost anything will grow, roses and strawberries flourishing all the year round in some parts, while others bear the palms and luscious fruits of the tropics. The great crop is maize, the "corn" *par excellence* of America, which here gives two crops a year, and supplies the food of the people in the form of *tortillas*, mashed to a paste and baked in flat, tough cakes, to be eaten hot, a diet that bears hard on Central American and Mexican housewives, since much of their time has to be spent on the preparation of this daily bread, not relished by a *gringo*. As in most parts of South America, *frijoles*, beans, black and white, stewed with a seasoning of pepper or chillies, also enter largely into the native fare, with tomatoes, potatoes, the root of the yucca, and other vegetables. Excellent wheat,

barley, and rice are grown, sometimes on huge *haciendas*, containing a dozen or score of Indian villages. As yet the crops of Mexico do little more than feed its own people, even falling short in thirsty years; but large tracts of waste land still await more careful cultivation than is the rule; so in the future this may well become a granary for less-favoured lands.

The peculiar Mexican growth is the cactus, here turned to various uses.¹ On the lowlands of Yucatan chiefly grows the *henequen* aloe, from which comes "Sisal hemp" now in such demand; and other strong fibres are got from pineapple leaves and from coarse grass. On the temperate highlands great plantations of the *magüey* raise their candelabrum-like branches, their stiff prickly leaves that seem of tin painted a dusty bluish-green, and their crowning stalk of yellow blossom thrown out only once in the plant's lifetime. This is what we call the American aloe, producing not only excellent fibre, paper, thatch, thread, pins, and needles for the natives, and food in its root, but *pulque*, the national beverage. Such "vegetable cows", when ripe, are literally milked three times a day by a man sucking their juice through a siphon formed of a large gourd with a cow's horn at the end, to be fermented in vats and hawked about in skin-vessels, or sent into the great cities in special trains with the morning's

¹ "Nearly every species is to be found growing in grotesque form, from creeping stems and round balls bristling with spikes, to columnar masses of prickly-pear and organ-cactus. The Turk's Cap, set with thorns, springs from crevices of the rocks at great altitudes. *Cereus grandiflorus* wastes the sweetness and glorious radiance of its short-lived bloom in deserted pastures. There are palisades of the tall, shapely organ-cactus lining the railways, and there are ragged and loose-jointed hedges of mingled varieties for corralling cattle. In this motley throng the *magüey*, armed with its bristling sheath of sword-blades, forms the rank and file. All the way from Tchuantepec to the Rio Grande it is seen, now massed in cultivated fields of hundreds of acres, and again straggling in neglected wilderness by the roadside, or on the rocky crests of inaccessible hills. So sluggish is its vital action that it grows and thrives where other forms of vegetation perish from sheer inanition. Standing in stony places where the soil is thin and sterile, it repeats in silence the old Mosaic miracle of striking water from the heart of the rock."—Isaac N. Ford's *Tropical America*.



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The Mexican National Beverage: milking the *maguey* plant for the preparation of *pulque*

milk. Foreigners do not relish this drink, looking and tasting like butter-milk with a dash of sulphur-water, and giving forth a pungent smell that has an unpleasant hint of putridity; but to the natives it is nectar, and on holidays they manage to get drunk on such thin tippie, which, like the South-sea *kava*, affects the legs rather than the head.

This is the beer of the country; its brandy is *mezcal*, distilled from the root of an aloe, which sets the Indians fighting when they can get enough of it, as do a rum called *habanero*, drunk in the sugar-producing lowlands, and *tequila*, a beverage made in certain parts from another aloe. One species of cactus, hence called the cochineal-fig, has been used for rearing the cochineal insects, once a speciality of Mexico; but this industry has decayed before the competition

of cheap aniline dyes. The organ-cactus bears a profusion of its *pitihaya* fruit, eaten by the peasantry. Another Mexican plant, the *chicle*, supplies most of the chewing-gum so much used in North America, an indulgence replaced here by the sucking and chewing of sugar-cane; and the *papaya* is cultivated for its yield of pepsin as a help to Uncle Sam's much-tried digestion.

Breweries have been introduced into Mexico, where their product began to supplant "the benumbing pulque and the inflammatory mezcal", at least in the cities. Rather than tea or coffee, in all Spanish colonies chocolate is the favourite beverage, by the better class drunk at all times and seasons from the early days, when Thomas Gage tells us of a seventeenth-century bishop being poisoned because he forbade the ladies

to have cups of chocolate brought them in church. But coffee is grown for export, as are cocoa, sugar, vanilla, tobacco, oranges, and other fruit. The rank alfalfa grass now feeds American paper-mills. Several experiments, as in wine and olive culture, have been made under Government patronage. The forests have a vast store of timber, dye-woods, rubber, and so forth; and the steppes and savannahs of the north breed small cattle that come to be fattened in Texas for a farther market.

The mines that once made Mexico's proverbial riches have now somewhat declined, to the eventual profit of the country, one of whose warmest advocates, Mr. C. F. Lummis, well reminds us not to be deceived by "a kaleidoscope of extraordinary contrasts, crazy luxury and great misery; the few rich, the many poor; the carelessness of all other than money standards; the looseness which accompanies any form of gambling". Almost every mineral is found in Mexico, including coal, but silver has been the chief product, which is still much worked, as to a less degree is gold, other metals being as yet more neglected. From deep mines the ore is dragged out by peons working naked, who reclothe themselves to be minutely searched before coming out, like the Kaffirs at Kimberley, yet they cannot always be detected in pilfering. There are parts where the soil is hyperbolically said to be a crust of precious metals, and where fortunes may truly have been hit upon by the accident of a camp-fire roasting a film of silver out of the barren ground. A Mexican peasant as he once was, Señor Alvarado died leaving, it is reported, £17,000,000, which he owed to such a lucky hit, and with which he had public-spiritedly offered to pay off the debt of the Republic. The great mine of Guanajuato, worked down to 2000 feet, that has already yielded seventy million pounds worth of silver, seems far from exhausted. Mexico's whole annual harvest of silver was reckoned at nearly £10,000,000 before the revolutionary disturbances cut down the yield of the mines, and its commerce generally, by two-thirds. Beautifully-veined

marbles, onyx, and alabaster are found, much used in ornamentation of the churches, in former days so sumptuously built by a tithe of the mining riches. In the Californian Gulf are pearl-fisheries, no longer, it appears, very flourishing. Opals, amethysts, and other gems turn up in some parts. The crater of Popocatepetl, whence the Conquistadores are said to have renewed their store of the gunpowder that appalled the natives, makes a mine of pure sulphur. A more recent addition to the country's resources is petroleum, wells of which are now worked about the east coast by British and American companies, whose profits have been heavily taxed by the civil war.

The late enhancement of silver should have gone to swell the national funds. Its previous lowered value, felt all over the world, seemed at first a heavy loss to Mexico, but proved to be a gain, as turning her attention rather to the manufactures that can be carried on here with the advantage of cheap if not very strenuous labour. Cotton-mills were successfully established in several districts, some on a large scale and with recent machinery. One, in British hands, was described as like a little city, with gardens and trees brightening and shading the homes of the work-people, enclosed by strong walls armed with cannon in the troubled times. Other large mills were notable for amenities and adornments that would make Lancashire operatives stare. The cotton used has still to be in part imported from the United States; but it is grown in the northern provinces of Mexico, which some day should have a surplus of this raw material to put upon the market, even if her own mills go on multiplying as they did before the war. Jute is another imported manufacture. Woollen cloth is also made, notably in the form of the brightly-dyed *serapes* that serve the men as cloak, blanket, or bed, while a characteristic garment of women is the long cotton or silk scarf called *rebozo*, folded round the head and shoulders. Some of the Indian tribes had an old repute for silk-weaving, which is now encouraged on a larger scale. Coarse unbleached cotton cloth is the chief

material for dress of both sexes. Their sandals and broad-brimmed, high-crowned straw *sombreros* are home-made. Pottery is an admired native manufacture, its form and colouring different in separate districts. Another local industry that has not far to seek a market is the making of cigars and cigarettes. There are flourishing factories

jewellers are often German Jews. Saddlery, grocery, smithwork, tin-shops, butchery, and baking are rather given up to sons of the soil, or to Spaniards, who, from the hardy north of the Peninsula supply a hopeful element of immigration.

In the cities, at all events, Mexico everywhere showed signs of change and improve-



Market Day at Amecameca, Mexico

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of leather goods, glass-ware, paper, soap, matches, tiles, &c. Many of these on a small scale are in native hands; while the larger establishments had been much controlled by foreigners. Implements and machinery, it appears, are chiefly supplied by the United States; but Britons have a reputation as plumbers. Brewing is carried on by Alsatians. The tailoring and drapery trades seem much affected by Frenchmen; hardware shops are kept by Germans; and

ment. Against its development are the inertness of the masses, their clinging to old ways, and the extent to which many large estates are held by rich absentees. In its favour were till a few years ago a strong and progressive Government, and the stirring example of its prosperous neighbour, no longer looked on as an enemy. At the end of last century Mr. C. F. Lummis, most emphatic as to the regenerating work of President Diaz, while admitting that this "is a very

human country with very human shortcomings", declared Mexico to be the "American Cinderella, who is very like to surprise some of her supercilious sisters". The metric system and decimal coinage are in use, though, here as elsewhere, old Spanish weights and measures die hard. The Mexican dollar, so much used in Eastern Asia, ought to have become the more respected in the world's markets, when the Government established a fixed gold standard; and perhaps a more significant promise of welfare was the fact that, during the last quarter-century, several hundred million dollars of Uncle Sam's capital have been invested in Mexico, as well as a good deal of John Bull's. But all those bright prospects were overcast by the Civil War, in which the peso or dollar, nominally worth

about 2s., came down in its paper form to the value of a copper coin. And if Mexico can emerge or be pulled out from the welter of murder and plunder into which she has been plunged, it remains to be seen how far have suffered the prospects and industries that should be spoken of, perhaps, rather in the past than the present tense. The Diaz Government left Mexico with a debt of 440,000,000 pesos and an unexhausted credit in the world's money markets, now closed to the bankrupt State. In a few years this debt had multiplied fivefold, while the rivals for power were mainly supported by the "taxation" or open plundering of foreign enterprises; but the first effect of the present rule was a hopeful rise in the price of Mexican securities, that for years had been so ill-secured.



A. W. Cutler

A Street in Vera Cruz, Mexico's chief port: buzzards following a scavenger's cart

Vera Cruz, formerly one of the most unhealthy cities in the world, is now looked upon by the Mexicans as a winter health resort! This is due to the American occupation and the buzzards, the natural scavengers.

STATES AND CITIES

The map of Mexico was, under Diaz, seamed by thousands of miles of rail, and by a thicker network of wires giving a remarkably cheap telegraph service. The railways, at once proof and cause of progress, all the more important to Mexico as making up for its lack of navigable rivers, will guide us in tracing out its most prosperous spots, since space fails to survey apart all the thirty divisions of this large country, and the wilds which Carl Lumholtz has described as "Unknown Mexico". Railway-making, indeed, came to a stand in the civil wars that dried up the supply of foreign capital; and the working of the roads has been difficult and dangerous amid contending armies that often counted it a victory to blow up a bridge or wreck a line, whether or no it were of strategic value to the enemy; but let us look at the main lines as they were at the outbreak of the revolution. As to statistics of population, also, we must be content with figures then available, since it is hard to say what destruction has been wrought here and there in that carnival of crime. The reader will bear in mind that other features in the following account may prove to have been marred in the years of revolutionary tumult. This is said to have made havoc among some of the rich churches that so often contrast with squalid streets, where, in better-class houses, all show of wealth will be hid away behind heavy doors and barred windows.

Leaving out of view for the moment the peninsula of Yucatan, which belongs geographically to Central America, we find the adjoining Isthmus of Tehuantepec divided between four States — Tabasco, Chiapas, Oaxaca, and Vera Cruz. It is crossed by 190 miles of rail between the Atlantic port Coatzacoalcas, renamed Puerto Mexico, and Salina Cruz on the Pacific, marking out what some maintained the best route for an inter-oceanic canal; and each end of the line, connected also with Vera Cruz, is now equipped with a good harbour by the enterprise of Lord Cowdray's firm, so active in

the development of Mexico. Hot and low-lying, for the most part, below its mountain chain, this region is not very well populated, mainly by a race of Indians of whom it is noticed that the women seem sturdier and livelier than the men. The recent revolutionary movements were less felt at the southern end of Mexico, yet an infection of lawlessness is said to have driven away many of the Americans that had settled here to grow sugar-cane and bananas. Another danger reminds this country of its connection with the fearsomely shaken ridges of Central America. In the spring of 1907 a severe earthquake, reported as destroying several towns, and at least scores of lives, visited the southern part of Mexico, where mere *tremblors* and *trembloritos* are too frequent to draw wide attention. The catastrophe, as often happens, seems to have been rounded off by a tidal wave sweeping the outer coast of the isthmus. Such waves have more than once left United States men-of-war stranded a mile or so from the Pacific shore. In 1911, on the day that the revolutionary leader entered the city of Mexico, it was shaken by an earthquake, with much loss of life, which superstitious partisans of Diaz might well take as ill omen for the new Government. Then under Carranza's tottering rule another shock spread death and destruction.

San Juan Bautista, with under 30,000 people, is the capital of Tabasco; as the smaller San Christobal, airily situated among the mountains, is for Chiapas. Here are the remains of several "buried" Indian cities, their very names forgotten; but what seems to have been the greatest of them, christened Palenque, from a village not far off, is famed in Europe by elaborate reproductions of its sculptures and hieroglyphic tablets. In the westward State, Oaxaca, lie the ruins of Mitla, capital of a people overthrown by the Aztecs, showing huge blocks and columns compared to those of the Syrian Baalbec, and, among heathen devices, that of the cross, to the amazement of early archæolo-



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Mighty Monoliths at Mitla, Mexico

gists. This is near the old Spanish city of Oaxaca, "still one of the most Mexican of cities", the birth-place both of Juarez and of Diaz, whose grandly-wild valley gave a marquisate to Cortes. From it a railway runs up to join the lines of the plateau.

Following the Atlantic coast, as it turns northwards round the gulf, we come to the city of Vera Cruz, landing-place of Cortes, and since then the chief port of Mexico, in spite of the yellow fever that annually scourged it till swept away by the first "norther" bursting in autumn over the

gulf, and bringing another danger to the shipping in the harbour. This, now much improved, is naturally a bad one, a better being available at San Anton Lizardo to the south; but Mexicans are slow to change, and Vera Cruz has hitherto held its own as main gate of the country, though now threatened by the competition of Tampico, farther up the gulf. The dreaded *vomito* is said to have been much checked by sanitary measures; but still the best scavengers of the place are its ominous black vultures, protected by law, which swoop down to fight over every piece of garbage. A sea-wall has been built to improve the harbour, fenced in by a coral reef, and by the grim island fortress of San Juan de Ulloa, behind which the somewhat decayed and shrunken city still makes a good show of white or tinted houses with flat roofs and green verandas, of tiled church-towers and blackened domes, fringed by cactus and cocoa-nut palms, and backed by the magnificent outlines of the Sierra Madre. When "transfigured by rich mists of sunlight", it may pass for

beautiful; and in its hot streets travellers find an introduction to the "local colour" of Mexico.

The railway rising hence to the plateau was the first in the country; there is now another line taking a more northerly bend by the conspicuous Cofre de Perote peak, at whose foot lies Jalapa, a lovely place which has given an unlovely word to our language in *jalap*. The older route, so often described, is the British-made line that from a belt of sands and swamps mounts into rich tropical vegetation and most picturesque

scenery on the lower mountain slopes, then, through the coffee-growing district of Cordoba, comes to Orizaba at the foot of its great volcano, 4000 feet above the sea. 'This small city is a typical remnant of old Mexico, and its churches contain some fine paintings by native artists. From its sugar and banana plantations the train ascends into a very wonderland of scenery, now passing the awful gorge known as Infiernillo, now in view of the green mountain-set valley of La Joya (the "Jewel"), now across a chasm two or three thousand feet deep, then for miles along a precipitous slope, where the houses below look like toys and the mules like mice. So steep is this way to the regions of oak and pine that three straight miles require twenty miles of curved and zig-zagged road. 'The highest point is over 8000 feet, whence the railway re-descends gently on to the great Anahuac plateau.

A branch leftwards leads to Puebla, itself

the centre of radiating lines, the capital of a State of the same name, and with over 100,000 people. This "town of the angels", as its full style is, was long the second city of Mexico. 'The old road from the coast to the capital passed by its spires and domes, rising among the grain fields and cactus plantations of a plain staked off by the three mighty peaks - Popocatepetl, Iztaccihuatl, and Malinche. Puebla has a name as centre of cotton and other manufactures, and its streets are renowned for a cleanness and airiness none too common in this country; but its modern development has not overlaid a dignity of architecture in which it surpasses the capital. Amid its new chimney-stacks are some hundred churches and convents, most of them, indeed, turned to secular purposes, several richly ornamented by painting and the onyx work and encaustic tiles that are a local speciality. 'The cathedral is judged by some finer than



The "Town of the Angels": street scene, Puebla, with the cathedral in the distance



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The famous Pyramid of Cholula

This artificial mound of sun-dried brick and clay (the largest of its kind in the world) is believed to have been built by a people before the Aztecs, probably as an imposing site for a temple. The temple which occupied this conspicuous position at the time of the Spanish Conquest was pillaged by Cortes, and the summit is now crowned by a chapel dedicated to *Nuestra Señora de los Remedios*.

that of Mexico, its architecture more severe, but its internal decoration a magnificent display of carving, marbles, and gilding, with the onyx pulpit and the gorgeous high altar as the most striking points. In the outskirts of the city stands the hill of Guadalupe, scene of many a fierce battle in Mexican history; then a tram-ride of a few miles takes one out to the famous pyramid of Cholula, believed to be the oldest of such monuments, rising over what was once a great Aztec city. This artificial mound, with a base of 44 acres, appears now a terraced hill, its worn-down outlines overgrown by wood and crowned by a Spanish church, such as may be seen by dozens from its top, each one perhaps marking the site of a native temple thus consecrated by the pious Conquistadores. With two smaller pyramids, their structure shown by the way

in which they have been quarried down for adobe bricks, this is all that remains of a hundred towering shrines found here by Cortes.

The bending course of the railway to Mexico brings it by another scene of past greatness, Teotihuacan, where once stood a city 20 miles in circuit, its site still overlaid by three layers of concrete, the purpose of which makes a hard nut for archæologists to crack. In the centre rise broken heaps of brick or stone, and above them the truncated Pyramids of the Sun and the Moon, the former nearly 200 feet high, with a base not quite so large as that of the Pyramid of Cheops. Round them the plough has turned up extraordinary numbers of tiny clay figures, mostly human heads, along with obsidian knives, arrow-heads, and other stone implements. The green of the ruined

plain has begun to climb the steep sides of these ancient monuments, which, like Cholula, appear to have been built by one of the mysterious early races preceding the Aztecs.

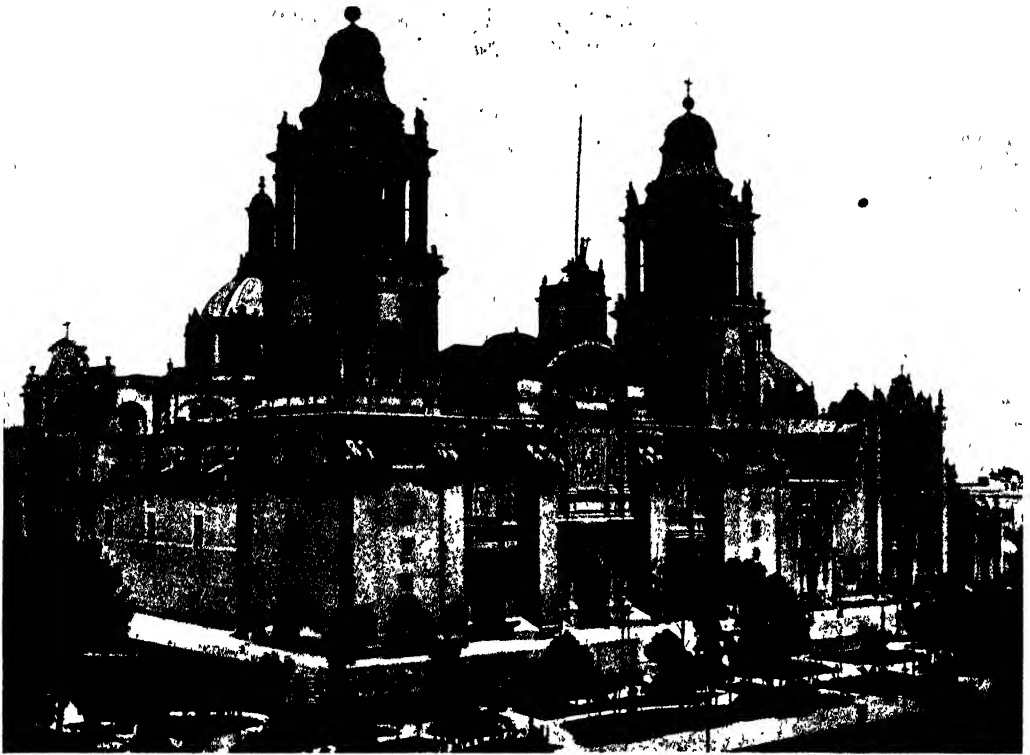
The city of Mexico, with some 450,000 people, is much the largest place in the country, and makes an epitome of its manifold life. Few capitals have such a noble situation, over 7000 feet above the sea, in a rich central valley, 70 miles long, of the great table-land, guarded by stupendous snowy peaks, that, through this transparent air, seem to stand close at hand. A picturesque but perilous feature, now a league or so distant, is the shrunken chain of lakes, in the very waters of which the Aztecs piled up their city of half a million inhabitants. These basins have till lately kept Mexico insecure, flooding its streets and rendering the ground so spongy that many buildings were warped or sunk through this cause, as well as from earthquakes. To get rid of the superfluous waters long made an engineering problem. The Spaniards undertook to drain their city first by a tunnel, then by the deep channel of Nochistongo, which took two centuries to complete. Such devices did not keep Mexico from being often inundated, once for years together, and from unwholesome damps; but the energy of President Diaz carried out the making of a new canal, which, with a modern system of sewerage, should clear a sanitary character hitherto far from good.

The name of Mexico specially belongs to its central State, in which the national capital, like Washington, occupies an insulated federal district. The city, that to Cortes recalled the enchanted scenes of Amadis de Gaul, has been styled the "Venice of the Aztecs", but a first view of its modern successor suggests rather Florence or Turin. It is built with Spanish regularity, showing only scattered remains of the past; and the general aspect is apt to prove "faultily faultless" as compared with some of its mouldering contemporaries. Mr. Hamilton Fyfe asserts, for his part, that no city is more rich in fine avenues, in splendid monuments, and in beautiful

buildings, where "architects and sculptors have been inspired by the spaciousness of the landscape, and especially by the two volcanoes Popocatepetl and Ixtaccihuatl, whose white summits shine with unearthly majesty against the brilliantly blue sky". Local colour is supplied by the motley populace, by the quaint signs of shops, by the leaf- and flower-wreathed booths for selling *pulque* and lemonade, by arcades of stalls, by repulsive beggars, by *carloncos* hawking charcoal, by carriers of water or offal, by swarthy *cargadores* under all sorts of burdens, by boys crying lottery tickets as well as newspapers, by peddlars of various wares, especially the brilliant feather-work made here, and huge bunches of scentless flowers. The chief street for shops is, or used to be, that of San Francisco, one part of it, known as the Jewellers' Street, running across the central Plaza to the Alameda Gardens; but this seems to be outshone by the new avenue called "Fifth of May", from the proud Mexican anniversary of a victory over the French at Puebla. The main thoroughfares meet in the Plaza Mayor, where the cathedral looks upon a garden in which palms and pines are brought to grow together.

The Cathedral of Mexico, built upon the scene of Montezuma's human sacrifices, is the most magnificent in the New World, its high altar unsurpassed for richness till partly stripped by successive spoliations, and it is said to have undergone sacrilegious violence in the late commotions. With its twenty-five side altars, this temple was still most richly adorned, but after a style criticized as gorgeous rather than beautiful.¹ With it is

¹ "The length of the building is 426 feet; the architecture is Doric; the railings of the choir, and the passage to the high altar, were made of *tumbago*, manufactured at Macao in China, and weighing 26 tons. It is a brassy-looking metal, composed of silver, gold, and copper, but containing so much gold, that an offer has been made to replace it with pure silver, and give many thousand dollars in addition. The cost of the cathedral—that is, of the walls alone—was over \$2,000,000. The interior of the building forms a Greek cross, and is divided into five naves. On either side of the main nave are wide chapels elaborately adorned and enclosed by bronze gates; the walls are clothed with pictures in rich old Spanish gold frames; and at one time a Murillo stood over the high altar, but the present archbishop, wise in his



Detroit Photo Co

The Cathedral of Mexico

connected a large church called the Sagrario, that gives a further choice of shrines. There are dozens of other churches in the city, most of them also large and sumptuous; but many of the ecclesiastical buildings that once half-filled it have been confiscated, pulled down, or converted to practical uses by the spirit of Mexico's new age. Ex-convents are found turned into schools,

generation, after the robbery of a famous picture from a church in Spain, caused it to be removed to the archiepiscopal palace, where it now hangs. There is no stained glass in the windows, and there are no such luxuries as pews; Indian and Hidalgo, Aztec and Spaniard, peon and peasant, kneel on the bare boards. One rude bench is reserved for the old and infirm. The choir is one mass of elaborate carving; the choir books, dating from 1620, are of vellum, and painted in black letters. Close to the choir is a magnificent altar, supported by green marble columns resembling malachite. A rich balustrade of *tumbago* connects the altar and the choir. The picture of the Virgin, in the central nave, was painted by Cabrena in 1700, and a St. Sebastian, in one of the chapels, by

hospitals, jails, barracks, hotels, stores, or stables; empty churches serve for public libraries; and the infamous seat of the Inquisition, after some vicissitudes, is now the College of Medicine, a sign of times in which doctors claim the authority once granted to theologians. Some of the Catholic buildings came into the hands of Protestants, who have several congregations,

Balthasar de Echavi, in 1645. The glory of the cupola was painted by Simeno de Planes; on the first plane are placed the ancient patriarchs and the celebrated women of the Old Testament, the colours being as vivid at this moment as when laid in. The balustrade surrounding the grand altar is also of *tumbago*, as are the sixty-two statues which serve as chandeliers. The high altar is approached by seven steps; the tabernacle is supported by eight ranges of pillars in the form of a colonnade, on the first of which stand the statues of the apostles and evangelists, while those of numerous saints occupy the second range. On the third appear groups of angels, and, rising from the midst, the Mother of God."—T. U. Brocklehurst's *Mexico To-day*.

not to speak of a Mormon one, all easily tolerated in the capital, if in out-of-the-way parts heretic missions have quite recently had to bear up against priestly and popular ill-will.

The most valuable possession of the Cathedral is the Aztec Calendar Stone, inserted in its outer walls, after long lying buried under the plaza. This priceless monument is carved with figures and hieroglyphs showing the astronomical attainments of a people whose records were recklessly destroyed by the pious zeal of the conquerors: "As there were none of their books which did not treat of superstition and lies of the devil, we burned them all", boasts one monkish Goth. Thus little more than scantlings remain from which to spell the outlines of that antiquity. The National Museum of Mexico has a remarkable collection of such remains, among them the sacrificial stone of Montezuma's temple, a single block of carved porphyry, also long hidden away as worthless or deluding, when its place had been taken by the Christian high altar. Montezuma's feathered cloak and shield are preserved here, as well as Maximilian's gilt coach and silver plate, native idols, specimens of ancient stone

implements and earthenware, hideous masks and skulls, some of the few Aztec charts and picture-writings that have escaped destruction, along with portraits and relics of the Conquistadores, and specimens of the country products. Some of the objects unearthed from Mexican barrows are purposely placed beside cases containing similar relics from the Mississippi region, to call attention to their resemblance. The days are past when Mexico was careless of her antiquities, when a "buried city" might be bought for a few hundred dollars, and its ornaments carried off to enrich European museums. The Government of Diaz treasured every stone that might illustrate a history of which the country was learning to be proud, perhaps too late to piece together its long-neglected fragments.

The Art Gallery is not less well equipped in its way, containing copies and originals by European as well as native masters, among the latter works Parra's much-admired picture of Las Casas imploring Heaven's protection for the Indians. Educated Mexicans show a taste for art, many private houses, not only in the capital, possessing fine ornaments and good collections of paintings, in which Rubens and Murillo



Aztec Sacrificial Stone

Detroit Photo Co.



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One of the Beauty-spots of Mexico: Santa Anita on the Viga Canal

This ancient waterway was made by the Aztecs for the conveyance of fruit, flowers, and vegetables from the "floating gardens" of Lake Xochimilco to Mexico City. The name is literally accurate, the cultivated soil being borne on floating masses of water plants, which form a thickly matted covering over the shallow waters of the lake.

seem to be well represented; and their *patios* are sometimes adorned with fresco-work by local artists. One village church contains a noble painting asserted to be by Titian. It has been observed, also, that while other South American cities seem content to adopt European opera music, incongruously brought even into church services, the Mexicans have a native school of composition, and prefer strains expressing their own temperament. The newspapers of the capital, if they do not exhibit a high standard of enterprise, are notable for their number, one of them having been an *English Mexican Herald*. Freedom of the press is quoted as one of the assets of Mexican civilization; but not long ago, at least, we are told how editors who made too free with the Government's doings would be sent to change their opinions in prison.

Other prominent institutions of the capital are the Conservatory of Music, founded by Maximilian's empress; the older School of Mines which excited Humboldt's admiration, and is held in one of the stateliest buildings; the Schools of Law, Agriculture, and Commerce; the National Library, placed in a sequestered church; and the Monte de Piedad or National Pawn Shop, a private benevolent foundation occupying the mansion built for Cortes, with vaults that have sometimes held an Aladdin-like gathering of riches, deposited in this popular bank by an improvident and much-plundered people. The Paseo and the Alameda are fashionable promenades, where the *lajartigo*, or Mexican "dude", makes a blot on national manners by his impudent ogling of ladies, who now change their picturesque dress for French fashions.

The National Palace, seat of the Spanish viceroys, fills a whole side of the Plaza, containing Government offices and the official residence of the President, who may make his home rather in his own private house or at the castle of Chapultepec in the outskirts. This Mexican Versailles, supposed to be on the site of Montezuma's palace, was ruined in the battle of Molino el Rey, where fell so many cadets of the adjacent Military Academy; but Maximilian had it restored

and decorated in imitation of Pompeii, often suggested by the interior arrangements of Spanish-American houses. Standing on the historic "Hill of the Grasshopper", and commanding a magnificent view, its grounds are renowned for their huge moss-hung cypress trees, for "Montezuma's bath", and for rocks carved with Aztec pictographs, which make this a favourite resort, the three miles' avenue hither and to the choice suburban village at hand being often crowded with all sorts of vehicles, from the American buggy to the English four-in-hand. Tram-cars, first and second class, are much used for going out to villages which bear such painful names as Ixacalco, Azcopotzalco, and Mixcoac.

Favourite excursions, near and far, are by canal to such "floating gardens" as the Aztecs gathered in their lakes; to the hill of Estrella, on which their sacred fire was solemnly extinguished every fifty-second year, then relighted and sent out to all parts of the kingdom as proclamation of new life for the world; to the Christian shrine of Guadalupe, where on a steep hill a chapel rich in silver and *ex votis* offerings marks a miraculous appearance of the Virgin, and draws multitudes of pilgrims so fervent that many of them crawl all the way from the city on hands and knees. Another place of pilgrimage, at the foot of Popocatepetl, is the Sacro Monte, whose cave-shrine contains a famous recumbent image of Christ, brought from Spain soon after the Conquest. From Mexico is often undertaken the long but not too formidable ascent of the great volcano, its sides bristling with cones of ice, *nieves penitentes*, so called from their fanciful resemblance to a procession of cowed penitents.

By rail a visit may be made to other cities: across the western mountain-ridge to Toluco the State capital of Mexico, lying below another fine volcanic cone; to Tula, where the remains of a pre-Aztec power have been excavated by M. de Charnay; to the large mining city of Pachuca, in the State of Hidalgo to the north, where Cornishmen had thriven by importing their native craft and industry; and to the Western

The World of To-day

State, Michoacan, whose capital, once one of several Valladolids, now rechristened Morelia, is distinguished by a fine cathedral and other churches. Past this, through grand scenery, the railway goes on towards the Pacific coast by the beautiful Lake Pascuaro, once set round with the palaces and temples of the Tarascans, so cruelly oppressed at the Conquest. In the small state of Morelos, south of Mexico, the romantically-situated pleasure-resort Cuernavaca may be visited for a sight of Cortes's Palace, for the Falls of San Antonio, for the Aztec remains of Xochicalco in this region, and the Caves of Cacahuamilpa, by Mrs. A. Tweedie declared to rank above the Mammoth Caves of Kentucky among those wonders of the world which modern exploration has multiplied by seven or by seventy.

From Mexico let us now pass northwards over the plateau, as can be done by two main lines running on to the United States. We may use the names first given to those lines, originally built by foreign enterprise; but the chief Mexican railways came to be united in a National group, controlled by the Government. The more extensive system is the Mexican Central, that goes north by Queretaro, capital of its State, where poor Maximilian was executed and buried, its old churches and noble aqueduct now shut in by buildings of flourishing industry; and in the vicinity is the Hercules cotton-mill, the largest in Mexico, which has been called "the model factory of America". The next State is Guanajuato, its capital reached by a branch line, a somewhat decayed city, whose great silver-mine once gave it higher rank, and still Guanajuato shows that mixture of modern improvements with imposing antiquity which is a characteristic of many Mexican cities. On the other side, a ramifying branch turns off, through the large State of Jalisco, towards the Pacific, passing by the Lake Chapala, 5000 feet above the sea, compared to the grandest lakes of Switzerland or Italy; but its resorts have a fearsome neighbour in the double-peaked volcano Colima. Thus is reached the city of Guadalajara, judged

by many the most beautiful place in the republic, though spoiled to the artistic eye by the way in which its carved façades have been washed in a prosaic zeal for cleanliness. Centre of both an agricultural and a mining district, with a population of some 120,000, also famed for their good looks, this has been outstripping Puebla for the rank of second Mexican city, long disputed between them. Their old rival Vera Cruz goes down in population, having a formidable competitor as Atlantic port in the more northern Tampico, at the mouth of the Panuco River, a harbour much improved by American enterprise, and thriving upon the oil-wells of this region. From Aguas Calientes, below mentioned, a branch of the Central line runs eastward to Tampico through magnificent mountain scenery; and as it has also railway communication with the north, this bids fair to become the chief shipping-place of the east side. Tuxpan, another oil-port to the south of an extensive lagoon here breaking the coast-line, may also rise, when peace and order allow a line to be made from the capital.

Returning to the main line, we reach Leon, a flourishing centre of leather industry, and Lagos, a smaller manufacturing city. The next place of note is the charming old Aguas Calientes, capital of the little State of the same name, whose name shows it the Bath of a republic well supplied with natural spas, while it is also an industrial centre. Then comes Zacatecas, a very lofty old town among rich silver-mines, its streets so steep that tram-cars run down one of them by force of gravitation after being hauled up by mule-teams. The State of Zacatecas adjoins Durango to the north, whose capital, Durango, an iron-mining centre, is reached by a line being pushed on through the long Pacific State of Sinaloa to its port Mazatlan. This is the International Railroad which, crossing the Central at Torreon, hence gives an alternative route to the United States, entered by the new "Gate City", called after Porfirio Diaz, and by the Eagle Pass.

Northwards from Mexico, the country through which the Mexican Central passes



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The Market-place, Zacatecas, Mexico

Zacatecas, situated about 8000 feet above sea-level, is a silver-mining centre. Its streets are so steep that tram-cars run down one of them by force of gravitation, after being hauled up by mule-teams.

has been growing more desolate and thinly peopled, "a hot dusty plain, covered with sage, buffalo-grass, and thorny cactus, with only rugged, dreary mountains visible in the distance". Some oases of prosperity might be found, as the cotton plantations about Lerdo, and up a branch to the Sierra Mojada on the east, where a mining town has grown upon a rich deposit of carbonates. The northernmost State, Chihuahua, largest of all, has cattle-breeding for its main industry; it is also a mining region whose silver ores built, in Chihuahua, its capital, a cathedral once seeming too grand for the population; but of late this place had been growing afresh through its position on the railway and the reviving of its mines by American enterprise, signs of which become

here more frequent. There are men still living who remember how this State, with its neighbours Sonora to the west and Coahuila to the east, were ravaged by cruel Comanche and Apache raids; but all was peace growing into prosperity, till the late civil war threw the Northern States out of gear.

The policy of Mexico's early statesmen was leaving here a desert as a barrier against the encroaching *gringos*, who yet could not be kept from pushing their enterprise across the border. Two hundred miles more by rail bring us across the Rio Grande into El Paso in Texas, a focus of far-reaching lines, facing the Mexican city of Juarez, that was half-ruined in the recent revolution. At El Paso ("the ford"), the Rio Grande ceases

to serve as boundary between the two nations; and hence westward, a 20-yards strip of no-man's-land is marked out by frontier posts for 700 miles.

Now amalgamated with the Central line is the Mexican National, passing through the eastern States to cross the Rio Grande much lower down at Laredo; and both of these have connection with the middle route of the International coming into Mexico by Eagle Pass. On the National route, crossed here by the Central branch to Tampico, the chief place is the high-standing San Luis Potosi, once a famed mining centre both for gold and silver, still the prosperous capital of a State of its name through which runs the Sierra Madre. Another lofty town is Saltillo, where a considerable British colony flourished at the breaking out here of Carranza's rebellion. The most go-ahead place on this side, in spite of its stifling site in a hollow among jagged mountains, seems to be Monterey, in the northern State of Leon, which, with many American citizens to push it on, has been fast developing through its industries, and as junction of another line to the Gulf port Tampico. Above Tampico, the Atlantic coast State Tamaulipas, with its small capital Victoria, is edged by sand-banks and lagoons; but at the mouth of the Rio Grande, close to the American frontier, is the curiously-named port Bagdad, and a little higher up the river stands Matamoros, that has a bit of rail running inland, no doubt to be connected in happier times with the trunk lines.

The Inter-oceanic line from Vera Cruz through Mexico is crossing the country to the seaboard state Guerrero, where Mr. Lummis declares Acapulco to be the most beautiful port of the Pacific, and second only to Sydney among the harbours of the world. Next to it in beauty he puts Manzanillo, higher up the coast, from which runs a narrow railway to the inland Colima. Then come San Blas, "than which there are better harbours, and worse"; Mazatlan, that, though only a roadstead, was the chief western port of old Mexico till cut out by San Francisco; and Altata, shipping-place of the Sinaloa mines. These ports, hot and

unhealthy as they are, will be more heard of when railways connect them with the central plateau. Guaymas, in the Gulf of California, is a good harbour, reached by a line from the United States through Hermosilla, chief inland town of Sonora, richer in coal than in crops.

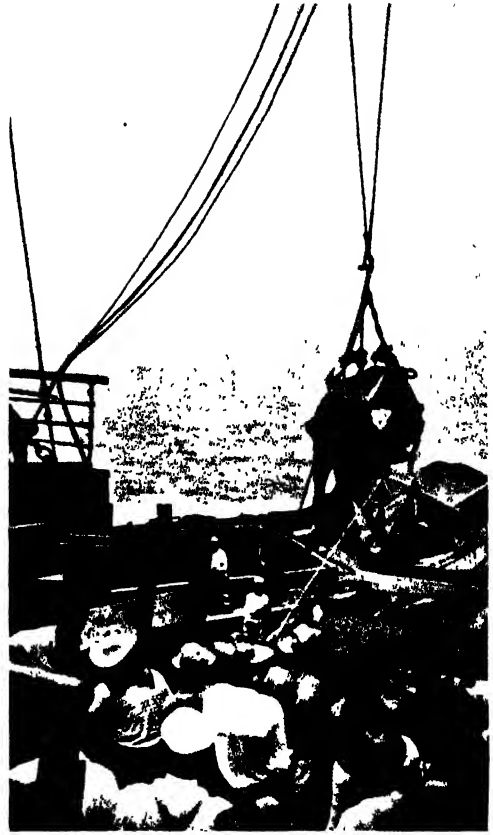
On the other side of the gulf, 700 miles long, the long ridge of Lower California is still treated as a territory, its chief place, La Paz, though an excellent harbour, having only 3000 or 4000 people. San Antonio, nearer the point, has grown larger through silver-mining. The whole mountainous promontory, rising at one point to 9000 feet, is scantily watered, so that only parts of it can be used for cattle-farming, or here and there in favoured spots for orange-growing, while the more frequent dry stretches produce esparto grass for paper-making. This neglected territory, as large as England, appears, however, to be rich in several minerals; and some islands of the San Loretto archipelago, about the centre of the Gulf coast, supply deposits of guano and salt. Uncle Sam thinks it a pity that this region seems wasted on a thin population of "greasers", and he suspects Japan of having also a covetous eye upon it. The expanding stretch of Upper California now belongs to the great Republic that some day may swallow up its sleepier neighbour, at least in the way of commercial union. So, boldly professes an American writer, "nature intended, when the Rio Grande was made a shallow stream that could be easily bridged for international railways, and the Mexican seaboard was left without harbours for the convenience of commerce".

Let us now turn back to Mexico's Central American dependency, YUCATAN. Across Campeachy Bay, that makes a south-western recess of the Mexican Gulf, extends this broad promontory, rising inland to low hills and forest-lands, but its tongue a bare flat plateau, pitted with caverns and vast limestone burrows that have often served as Caves of Adullam, also with natural wells called *senotes*, by which the ancient inhabitants reached its subterranean

waters, sometimes thermal and strongly mineralized. Those deep hollows may act as vents for escape of volcanic gases, as earthquakes are not felt here. The coast is edged by dunes, lagoons, and mangrove-swamps, beyond which an extensive coral-bed, the "Yucatan Bank", is growing up towards the surface as submarine horn of the Bay. At the north-east corner Cape Catoche points towards the western end of Cuba, and between them the Yucatan Channel unites the Gulf of Mexico with the Caribbean Sea. The climate of the promontory is hot and unhealthy, though occasionally cleared by the violent *norte* winds that sweep the coasts of this region.

Yucatan, an area as large as England, now belongs to Mexico, but at one time it asserted its independence, and the Indians, who form far the majority of its thin population, are in the southern parts practically unsubdued, their country, indeed, being impenetrable. It is divided into the two provinces, Yucatan and Campeche. The region has lately been troubled by disorders that seem a reflex movement of the revolutionary war in Mexico and of the chronic turbulence of Central America. The rich cathedral of Merida, with other ecclesiastical buildings, was sacked by a mob to cries of *Viva Carranza*. The chief place of the former province and of the whole promontory is this city, connected by rail with its new port Progreso, not far from an older one, Sisal, which gave the name of Sisal hemp to the henequen fibre that makes the principal produce of the stony flat. From Merida, which in 1910 had over 60,000 inhabitants, a line runs farther inland to Valladolid, and another to Campeche, capital of the neighbouring province, its name, often spelt Campeachy, familiar to us through the logwood trade.

Other small towns here are not so famous as the long-ruined Indian palaces and temples, pyramids and monuments, their sculptured stones sometimes used as building materials by a generation forgetful of the past. Such remains, already decayed at the time of the Conquest, show their constructors to have been among the most civilized



Unloading Cattle at Progreso, the port of Yucatan, Mexico

peoples of a remote age. Some of their "buried cities" lie within the present bounds of Honduras and Guatemala; but the forests of Yucatan and the adjacent Mexican provinces are thickly set with the like traces of close population, at one time apparently gathered into a great empire or league of princes, whose inscribed records and emblems, for want of such a key as the Rosetta stone, prove harder to interpret than the Pharaohs' hieroglyphs.

Here was the central seat of the Mayas, that mysterious race whose early culture seems to have been infused through neighbouring peoples, as from them among the conquering Aztecs; and some trace of their religious notions still affects Indian minds

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beneath a veneer of Christianity. The history of this remarkable race, so far as it can be read from its monuments, appears mainly myth. Its massive structures were ornamented with elaborate designs, in colour and relief, from which the builders can be made out as sturdy and well-grown, addicted to the practice of artificially flattening the head, so common among American Indians, and to personal decoration by means of paint, tattooing, and pendants in ears and nose, along with feathers, shells, beads, and so forth. They wore clothes woven or plaited, which on ceremonial occasions decked them out in most imposing style. They lived by agriculture, hunting, and fishing, had rude musical instruments, and pottery of no small excellence. But amid all these features, common to them with other superior Indians, stands out their remarkable knowledge of astronomy, shown in a solar calendar of 365 days, and a ritual division of the year into periods of twenty days, calculations which had to be roughly reconciled by various devices for avoiding confusion in their festival dates. This, with their skill in architecture and their complex mythology, have puzzled scholars, who find here the wisdom of the Chaldeans and Egyptians paralleled in remote times on the other side of the earth.

Dr. le Plongeon, in his fanciful account of the antiquities of Yucatan, suggests that the famous old civilizations of India and Africa may have come from the so-called New World, through what he holds to have been a powerful colonizing people before

the dawn of authentic history. He tracks the Mayas' religion and customs to Hindustan, Afghanistan, Egypt, and elsewhere, and gives reasons that the Magi of Chaldea may have been of this race, that *Mene, mene, tekel upharsin* could have been interpreted by any Maya sage; and that Christ's last words on the cross, *Eloi, Eloi, lama sabachthani*, are plain Mayan for "I sink; darkness covers my face". Thus boldly America can invert any claim of her dependence on the Old World! Another writer suggests a prehistoric Phœnician intercourse with America.

A certain resemblance to Egyptian structures and sculptures has been noticed here; but it seems improbable that these ruins can be as old as those of Egypt, when the damp climate and rank vegetation of Central America have told on them even since their discovery. A connection between the Nile and the Gulf of Mexico is, of course, no new theory, one guess being that both regions may have been peopled from the vanished or visionary Atlantis of classical writers. Some observers of what seem Mongol features in the Red Indian, have supposed the Mayas akin to the Chinese. Lord Kingsborough ruined himself by the production of huge and sumptuously-illustrated tomes labouring to identify the Mexicans with the Jews, a kind of speculation less hopeless in his day. For a sounder study of the problem, at once more concise and cautious, the reader will do better to consult Mr. T. A. Joyce's *Mexican Archaeology*, one of the most recent works dealing with this overlaid civilization.

• CENTRAL AMERICA

The two main continents of America are joined by a long crooked neck of land, here and there swollen out by broad promontories, but in the south contracting to an isthmus which can be crossed in a day's march. On the map it appears to be traversed by a line of mountains connecting the Andes with the Rockies; but geographical pundits will not allow us here to use either name for these irregular mountain groups, that seem to represent ancient islands, elevated and agglutinated by the slow forces of time, or more rapidly by volcanic convulsion, still shown in occasional eruptions and in frequent earthquakes. A row of mostly dead or dying craters edges the steeper Pacific coast, which is deficient in good harbours. The eastern side is generally lower and more deeply indented, but access to its natural ports is often barred by sand-banks, and by the coralline islands called "cays" or "keys", which are a feature of the Caribbean Sea. To this coast also flow the longest rivers, none of them very considerable, their often-flooded course making ways through the thick forests.

Central America is South America in miniature, if we may use such a term for an area some twice as large as the British Islands. Except as tempered by altitude, it has a hot, moist, depressing climate, more so on the Atlantic than on the Pacific side, drier on elevated plains shut off from the winds of both oceans. As we draw near to the Equator, the characteristics of this long neck of land grow naturally more and more tropical. In general there come a markedly wet and a dry season, the latter known as summer, though it may correspond with some of our winter months, the

former falling in the middle or towards the end of the year. Much of the country is still covered by tangled forests, in which lurk the panther, the puma, the jaguar, with venomous serpents and a host of stinging insects. The monarch of the woods is the great ceiba tree, its trunk buttressed among groves of mahogany, cedar, oaks, and pines, mingled with palms, bamboos, and climbing stems on which orchids and rich blossoms profusely speckle "a myriad tangled greens".

The history of this region is the same as that of all Spanish America, a sad tale of greed, cruelty, and oppression, then of colonial misgovernment giving place to factious disorders under the name of liberty, and of a religious bigotry that has largely absorbed the native superstition, though still, it is said, nominally Christian Indians may be found reverencing idols hidden in the mountain ravines. Much of Central America is hardly known; most of it is open only to the more adventurous class of travellers, who have often to complain of their lodging, thankful for shelter in the bare walls of the *Cabildo* or public hall of some townlet, whose *Alcalde* will perhaps be a barefooted Indian, proud of the silver-headed staff that is his badge of office. In the larger cities, indeed, and on the railways that lead to some of them, hotels of sorts may be found, usually due to foreign enterprise. Railways and roads are making such progress as is possible in lands that have neither money nor credit. But once off main tracks, strangers have soon to sigh with Frau Selser: "How few the days when all one's beasts are sound, the servants quite sober, the harness in order, the porters



On the Steps of the *Cabildo* (public hall), Atitlan, Guatemala

A. P. Maudslay

punctual and agreed as to the division of their burdens, the start made early enough, and the resting-place reached before sunset!" Under such difficulties many excellent books of Central American travel have come to be written, this lady's own (*Auf alten Wegen in Mexico und Guatemala*) not the least interesting, as Mr. John L. Stephens's well-known work is most entertaining, and Belt's *Naturalist in Nicaragua* highly instructive from its point of view.

When the Spaniards broke into this region they found it thickly inhabited by various nations, some of them enjoying or having declined from a remarkable state of civilization, brought to utter ruin by the Conquest. Soon they were being exterminated by hundreds of thousands; yet in some parts they held their own. There was a district here into which no armed force could penetrate, so strong were its natural fastnesses,

and so fierce its inhabitants; it got among the conquerors an ill name as the Land of War. When Las Casas and his brother Dominicans denounced the cruel greed of their countrymen, a band of devoted missionaries got leave to carry the Cross there at the risk of their lives; then on the mild bidding of such visitors the unsubdued warriors were brought to lay down their arms; and henceforth that rugged sanctuary became known as the Land of Peace. Thus, in the northern region of Central America, some tribes of red men escaped utter destruction and debasement. The chief race seems to have been the Maya or Quiché Indians, whose superiority is attested by the remains found in their tombs, and by the extensive and solidly-built cities that, overgrown in rank jungles, remained "buried" even from those living close to them, but in the course of the last century have been discovered and

described chiefly by foreign explorers. Maize often supplied their chief food and drink; they were found making an intoxicating beverage from honey also; some of the tribes were well acquainted with pottery and other arts; and the early Catholic missionaries were edified by the discovery of rites suggesting their own, or by a native morality, as well as immorality, soon debauched through intercourse with coarse Christians.

As in the case of the ancient Peruvians, with whom they may have been akin, these peoples had been displaced or subdued by more warlike invaders, the Aztecs from one side and the Caribs from another; and various stocks may be doubtfully traced by ethnologists, who in some parts might work upon remnants of pure Indian blood, if the natives could be brought to parley in their forest fastnesses. In others, they have been hopelessly confused with their white conquerors and with blacks introduced chiefly on the east side. The half-castes, here termed *ladinos*, who make the leading if not the most numerous element in this population, are much as we shall see them all over South America, proud, ignorant, indolent, ready in speech but slow in action, unless as easily excited to violence, given to extravagance when they may, to industry only when they must, the slaves of custom, and generally unfit to be free citizens of a progressive State. Education is usually backward, and the art held in most honour among them is music. What may be called the national instrument is the *marimba*, a sort of giant zither, formed of strips of wood and hollow tubes, which, beaten on by three men at once, gives out notes at once deep and sweet.

Central America, overrun by the Spanish adventurers from New Spain and New Granada on either hand, came to be known as Guatemala, sometimes as the "Kingdom of Guatemala" in admiration of its riches. The unity of Spanish rule dissolved into some half-dozen States, which for a time held together as a Federal Commonwealth; but their bond easily broke, and though more than one attempt was made to reunite

them, petty jealousies have kept them apart in feeble, distracted, and poor independence, sometimes at war with each other, often torn by internal strife, and always exposed to tyrannous dictatorships. History hardly condescends to notice their turmoils, some hint of which may be given in a brief sketch of each of the so-called Republics, less familiar with battles than with raids, flights, and massacres. At the end of last century three of these neighbours, Nicaragua, Salvador, and Honduras, again tried to stick together, but held fast only for two years, and have been lately at obscure war. For the many local revolutions the people are not altogether to blame, as foreign financiers and soldiers of fortune have sometimes seen their interest in stirring up strife. Now the United States exert themselves to keep the peace here; and the establishment of a Central American Court of Arbitration seems a hopeful sign. The great Republic, indeed, so jealous of European interference across the Atlantic, has lately shown some disposition to assume a sort of protectorate over these quarrelsome neighbours among whom it has a good deal of capital invested.

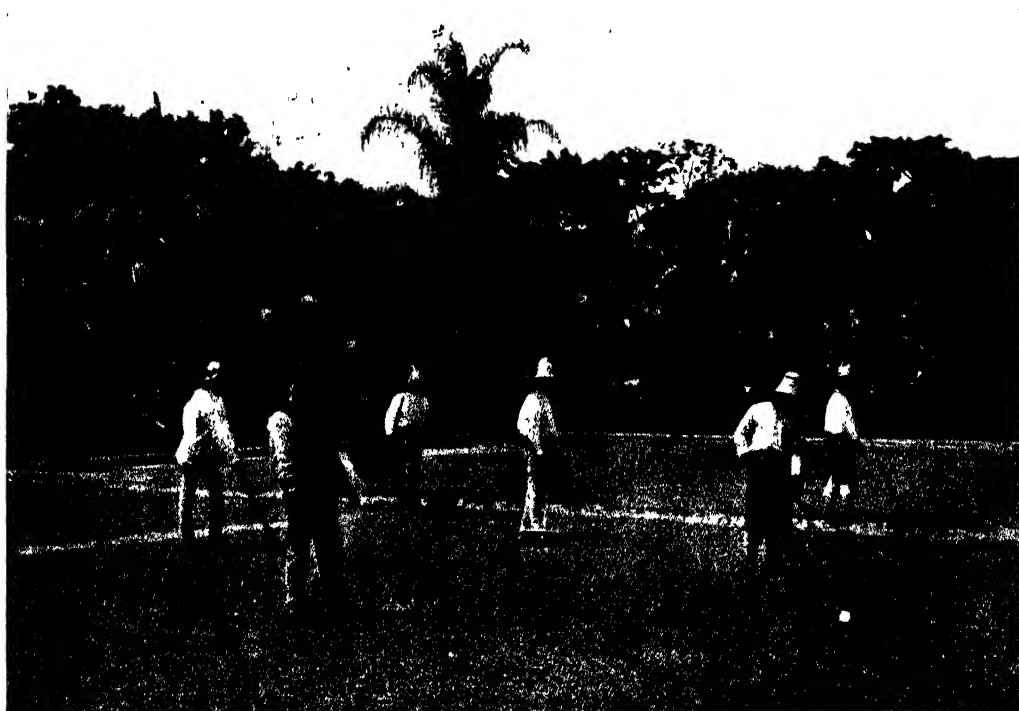
Our connection with this region was long a somewhat irregular one. Like flies about a carcass, British and other buccaneers swarmed on the track of the Spanish platefleets; and some of these crews made their lair on the Caribbean coast, whose natives welcomed and furthered them as foes of the Spanish oppressor. To them, and to runaway negroes from our West Indies, as well as to commercial relations, is due a sprinkling of English jargon still spoken along part of the eastern coast. For the sake of its valuable timber, Britain claimed on these shores a certain protectorship, always denounced by Spain, and latterly restricted to the district of Belize. In recent times the Central American States have come into closer commercial relations with North America, Uncle Sam finding here a supply of bananas and other tropical fruit within a short sail of his own ports. Germans, also, are conspicuous among foreigners who in the towns represent commerce and progress, while Britons have of late years let

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themselves be ousted from their once leading part, though the American United Fruit Company that has such large interests here was fain to sail its banana boats under the Union Jack.

Coffee has hitherto been the chief growth for export, but other enterprises are now being developed, notably cotton, sugar, and

plumaged birds, such as the quetzal parrot of Guatemala, so proudly beautiful that he does not survive captivity. The shallow banks of the Caribbean Sea and its estuaries swarm with the brilliant fish that excited Columbus's admiration, some of them poisonous, others excellent eating, like the jew-fish found twenty feet long, and the



A Delicious Product of the "Hot Lands": coffee beans drying in the sun

The coffee plant prefers a mean annual temperature of 60-70° F., and flourishes on mountain slopes at an altitude of 3000-4000 feet. Three-fourths of the world's supply comes from Brazil, but the Central American States produce large crops both for their own use and for export.

rubber. The cultivation of coffee and the use of cochineal dye were introduced by the monkish civilizers, as a specimen of whose experiments a tree at Antigua is shown bearing four kinds of grafted fruit. The forests are very rich in valuable timber. The once famous mines of the mountains at present mostly lie fallow, yet here and there hopeful prospectors are at work. A good breed of cattle is fed on the grass-lands. The forests are full of game and brilliantly

shoals of sheep's-head fish, besides turtles to be had for the turning, ugly alligators and the swarming sharks from which an American company proposes to wring articles of commerce—oil, jelly, leather, walking-sticks, and so forth. Central America, then, like most of the southern continent, wants no elements of prosperity but capital, industry, communications, security for life and property—in a word, good government, that growth rare in tropical regions.

Such a picturesque and prolific region is sorely liable to be laid waste by eruptions and earthquakes. But a direr curse on it has been the political convulsions that keep unstable the backward States whose citizens can be roused to bloodshed from their favourite occupation of "lying under the mañana tree", that is, putting off till tomorrow what ought to be done to-day. In some of the Central American republics, indeed, there are signs of better management and steadier progress; but so there were in Mexico till its civil peace went to the winds

of faction. Most of them, taught by experience, have lately been making efforts to meet a notorious default in their public debts. Another hopeful sign is representatives of all five coming together in the autumn of 1920 to discuss proposals for unification.

A short sketch of the position and prospects of each of these uneasy neighbours will bring us to the Panama Canal, that, constructed by men of another temper, may now be taken as dividing North from South America.

BRITISH HONDURAS

Like a clearing in the jungle of misgovernment and corruption is the Crown Colony that at present represents the once wider claims and intrusions of Britain on the Atlantic coast of Central America. Parted from Mexican Yucatan by an inlet of the Honduras Gulf, this territory is about the size of Wales, with a population of some 40,000, chiefly descendants of negro and Indian slaves from the West Indies. A few hundred white, and a few thousand coloured men, are gathered at the capital, Belize, or Balize, which gives an *alias* to the colony in the name said to be transmogrified from that of Wallace, a once notorious freebooter of the Caribbean Sea. Many of the white men appear to be Scots, found in so uncongenial a climate seeking the United States dollars and British sovereigns that both pass here

as currency. The coast is low and swampy, but rises into a fine forest region, from which come the mahogany, logwood, and other timbers that are the principal exports.

The mahogany is a stately and beautiful tree, its glossy crown bound up by a great buttressed trunk, whose rich wood, so familiar in our dining-rooms, supplies rudely-made stools to the poor huts of the black and brown people. Logging camps are formed in the interior, from which the timber will be transported on strong wheeled trucks, drawn by teams of bullocks, or on sledges over soft ground, to the streams that when flooded carry them, ridden by often-ducked Indians, down into larger rivers, there to be made up in rafts and drifted out by the tide.¹ The vessels on which they are loaded must often lie well

¹ "The Indians are not powerful nor enduring workmen, yet they ply the axe with great skill. But when they come to the heavy task of rolling the great logs with hand-spikes along the truck-pass to the creek, their strength and endurance are taxed to the utmost. . . . The long vista of the truck-pass admits a blaze of sunlight into the dark forest, and at the end of it is a small cleared space, surrounded by foliage, in the midst of which stand the great black trunks of one or two mahogany trees, their tops waving in the cool trade-wind, while the air below quivers in the sultry calm. Round the huge spurs of the trees is reared a slender stage of poles, and mounted on this, often 20 feet from the ground, two brown figures, naked to the cloth round their waist, ply with measured stroke the glistening axe, from which chips fly in all directions. Through the long hours the blows fall on the tree; already a huge gap is opened in the red wood; now and then a faint sound is wafted from the distant part of the

forest where another party is similarly occupied, and is immediately answered by all within hearing; then the men ply their strokes with renewed vigour. On one side, where a great trunk has already measured its length on the ground, and lies prostrate amid a ruin of torn branches, a party of six men, three on each side, draw the long saw backwards and forwards with a measured pull. Their brown backs, covered with sweat, glisten in the sun; beside them is a little fire of mahogany chips, and the pipe and the joke are passed merrily round. Presently a loud crack is heard and the axe-men are seen hastily scrambling down from their stage. The fellows seated so comfortably at their saw have already fled; a volley of cracks succeeds; the lofty top of the tree slowly inclines over, and the monarch of the forest yields to its fate with a roar of broken branches and a thump that shakes the earth for half a mile round about."—C. Napier Bell's *Tanguera*.

out at sea on this coast, edged by shoals and cays, where cautious navigation is necessary to reach such a harbour as Belize offers beside its line of white houses seeming to stand out of the water. One is tempted to surmise as the root of its name, not that unworthy Wallace, but the French—and old English—*balise*, broom, from the bushes used in beaconing these shallows.

Beyond the Cockscomb Mountains in the background, whose spurs come down almost to the sea, another range has now been explored, the highest peak, 4000 feet, receiving the title of Mount Joseph Chamberlain, while the whole of this elevated region, said to be very promising both in soil and climate, was loyally christened King Edward's Land. By all accounts it appears to offer a field of settlement; and settlers of the right breed will not be scared away by the present occupants, including the huge "Tommy Goff" snake that lends its bulk to fabulous stories; another dangerous serpent known from its stripes as the

"Barber's Pole", which seems to be the same as the Spanish *El Coral*; and the jaguar, who here plays the part of tiger; so that exciting sport as well as profit may be looked for on this newly-discovered ground, swarming also with brilliant birds and insects flitting among glorious vegetation.

Already a bit of rail has been made into the interior from Stann Creek, which has a better harbour than Belize, and may thus become some day the most important place of the colony. Belize is head-quarters not only of the Government, but of an Anglican Bishop, whose diocese includes all the West Indian negroes attracted to Central America by its fruit-growing industry, in which British Honduras is well able to take a share. As Bishop Bury tells us in his book, *A Bishop Amongst Bananas*, these expatriated blacks pride themselves on being British subjects—or British *objects*, as they sometimes express it; and they have some reason for pride in contrasting this colony with the state of its bigger neighbours.



Squaring Mahogany Logs at Belize, British Honduras, for the British Market

GAUTEMALA

The northernmost of these States, whose name once spread over Central America, is, if not quite the largest of them, the most important, with the advantage of not having experienced any revolution in the present century. During this period it has been masterfully if not unconstitutionally ruled by President Cabrera, called the "Diaz of Guatemala", and it now shows signs of progress as Mexico did before its strong man came to naught. About Cabrera also there are varying opinions, one representing him as a beneficent dictator, another as an execrated tyrant who durst not stir out for fear of assassination. Nearly as large as England, Guatemala has a population of some two millions, most of them pure-blooded Indians, who, as a rule, exhibit the virtue of not much caring to meddle with politics; yet their occasional excitement, and the chronic feuds of the half-breed minority, have supplied a volcanic element to a somewhat remarkable history.

The enlightened Morazan became head of Guatemala and the Central American Federation, but in 1843 fell foul of the Church by playing Henry VIII with its property. Against him, as champion of orthodoxy and of State rights, arose Carera, "King of the Indians", an illiterate swineherd like Pizarro, and accused of beginning as a bandit. His fellow-natives, excited by an outbreak of cholera, which they set down to poison,* followed this leader in what seemed like to become a war of extermination between the two races. With savage cruelties he not only drove out Morazan, but succeeded in making himself tyrannical despot of the country for a generation. After his death came about a Liberal counter-revolution that raised to power Rufino Barrios. He ruled for a dozen years, arbitrary and vainglorious, but with ideas of progress that gave a great impulse to the republic. He clipped the wings of the Church, invited Protestant missionaries,

set up a police force, put down crime with a high hand, enforced the observance of Sunday, attracted immigrants, established a university and schools, with compulsory attendance and teaching of English. Looking to the United States as his copy, he had at heart to extend such a progressive movement to the neighbouring republics under his general dictatorship. This scheme he tried to carry out in a clap-trap manner, rather characteristic of the man, one night at the theatre proclaiming that there should again be a single Government over all Central America, with himself as supreme ruler. He had quietly been gathering an army of 40,000 men to carry out this *coup d'état*, received with enthusiasm in Guatemala, but not by the other States concerned. Only Honduras concurred in his self-election; the rest, once recovered from their amazement, prepared for resistance. Unfortunately for Barrios, the international cable, landed in Salvador, was in the hands of his opponents, who were thus able to misrepresent him abroad and to shut off Guatemala from communication with the world. A reaction against the aspiring dictator had already set in among his own subjects when Barrios fell in a skirmish with Salvadorian troops, and that was an end of the war. Barillas, who succeeded Barrios, was opposed by another member of the Barrios family, and both of them came to be assassinated. For a time anarchy reigned in Guatemala, which, however, righted itself with another firm hand at the helm; and since then the country seems to have gone along pretty well with the aid of some caulking to its Constitution.

Like so many other American States, Guatemala has three zones of climate and production: warm lowlands on the coast, elevated plains enclosed by mountains in the centre, these rising to higher ground in the north-west, cold enough for pine woods and such crops as barley. Its most striking feature is a line of volcanic peaks above

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the Pacific, whose culminating point, Acate-nango (13,600 feet), appears to be the highest summit of Central America. Most of them are now extinct, but they have left plain traces of their operation in the past, such as the beautiful lake of Atitlan, which, if not originally a volcanic crater, seems to have been dammed up by eruptions, and has no

when thousands of Indians had been at work on it for years, either an eruption or a storm burst the crater above, and an avalanche of water and ashes poured down to bury the city with its inhabitants. Remains have been dug up that show on what a sumptuous scale these conquerors founded their new homes.



The Lake and Volcano of Atitlan, Guatemala

A. P. Maublay

visible outlet for the waters that pour over its cliffs. Fuego, almost as high as Acate-nango, is still fearsomely awake; and its finely-shaped neighbour, Agua, had one destructive outburst in the days of the Conquest. Beside these two lofty peaks, soon to earn their names of Fire and Water, were the first settlements of the Spaniards in a district which they aptly declared to lie between Paradise and Inferno. Alvarado, sent out by Cortes to take possession, built the first Guatemala at the foot of Agua, but

At once a new city was begun three miles off at the foot of Fuego. For more than two centuries this flourished among the chief seats of Spanish America; but in 1773, without warning, the great volcano shook itself, and the solid magnificence of Guatemala crumbled like a house of cards. It seems now the most impressive group of ruins in America, with remains of churches and monasteries by scores, and of miles of costly houses, spread out round the cathedral, which, as well as some other public

buildings, has been restored; for at Antigua (Old Guatemala), as it is called, is regathered a considerable population, not much afraid of fresh disaster since the volcano was bound over to good behaviour by priestly ministrations.

Thirty miles eastward of the New World's Herculaneum and Pompeii was built the third city of Guatemala, out of the way of mischief, as it hoped, high above the sea, on a dry and dusty plain. Its growth was for some time checked by want of water, supplied by a long aqueduct; and now this extensive city, with its low square houses standing in gardens, has a population of some 100,000, making it the largest place in Central America, though only half the size of its famous predecessor, and not of such distinguished architecture, but showing signs of practical progress, for which it boasts itself a "Little Paris", and carries out the character by a stately theatre, as well as a towering cathedral. The upper classes come much within the influence of foreign fashions. The rest stick to their native costume, for the women a very picturesque one, woven and embroidered by their own hands; the working-men by choice wear next to nothing; but Barrios was very particular in forcing them into shirts at least at the city gate, a regulation which had nearly caused a revolt till the masterful president clothed the naked at his own expense. A later president of the same family, Reina Barrios, was not so generous, if it be true that, having an interest in the success of a boot factory, he decreed that no barefoot should exercise the rights of a citizen.

Under President Cabrera, the city of Guatemala has been much improved. Five thousand feet above the sea, with a healthy climate, it is well drained, lighted by electricity, traversed by tram-ways, ornamented with parks and avenues, and shows many fine buildings, among them hotels, hospitals, and all that becomes an "up-to-date" capital. It is the seat of the British minister, whose services are shared among

neighbour States, also of the Bureau of Central American Republics, by which it is hoped to settle the quarrels that have too often troubled their relations in the past. Another mark of progress was Guatemala's being chosen as meeting-place of the fifth Pan-American Medical Congress. Cabrera's Government has paid attention to sanitary science, as to popular education. One of the sights of the city is its Temple of Minerva, an imposing classical structure, which makes the annual centre of a scholastic holiday festival, kept up for several days throughout the country. This institution of the president is criticized by some who find too much holiday kept in Guatemala; but he seems bent on training its rising generation to habits of intelligent industry. The once congenial spectacle of bull-fighting is said to be no longer so much in favour, having, indeed, taken the more merciful form in which the bull's horns are muffled like the point of a foil. For more instructive amusement has been made near the Temple of Minerva an ingenious map or miniature reproduction in cement of the whole country, showing in colour and relief its magnificent contour of mountains, rivers, lakes, and towns, on a scale that gives the lofty volcanoes about the height of a man, to be looked down at from a platform above.

The Government has also been concerned about communications. Through the capital a transcontinental railway runs from ocean to ocean, with the port of San José as its Pacific terminus. Higher up this coast are Champerico and Ocos, from which rails run to the coffee plantations inland. Separate bits of line are to be connected, and will soon be joined with the ambitious Pan-American Railroad that, reaching Guatemala through Mexico, aims at linking up the lines of the whole continent.

On the Atlantic side the chief port—named after an Anglo-Saxon Solon called in to fit this republic with laws—used to be Livingston, at the mouth of the lake-like Dulce estuary, one of the many beauty-spots of Guatemala;¹ but the transcontinental rail

¹ "For at least ten miles the river runs through a cañon, which is a wonderful curiosity, like our

western cañons, but far more beautiful, because instead of barren walls of rock is most luxuriant

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The Plaza, Coban, Guatemala

A. P. Maudslay

has made its terminus at Puerto Barrios, on the Honduras Gulf, where Guatemala has a smaller stretch of coast, wedged in between Honduras and British Honduras. Near Zacapa, a thriving town on this line, are the ruins of Chirigua, one of those ancient buried cities, where remarkable carved obelisks have been discovered. On the east side, near the corners of Honduras and Salvador, Esquipulas is noted for a stately

church that makes the Mecca of Central America, in one year attracting over 70,000 pilgrims. The mountainous north-western Los Altos, an independent State till conquered by Cabrera, has as its chief place Quezaltenango, which a recent German traveller declares to be in a fair way of rivalling Guatemala. In the centre are Santa Cruz del Quiché, near the ruins of another great Indian city, and Coban, north

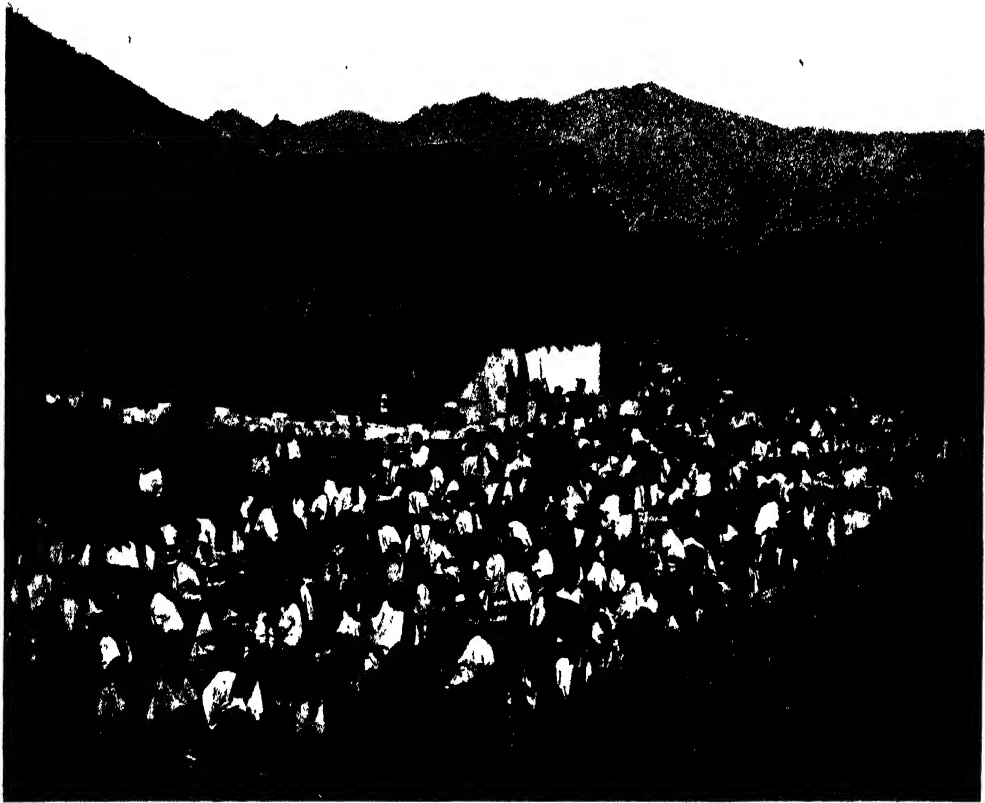
tropical verdure. The stream is very narrow, and the banks rise exactly perpendicular from the water, hundreds of feet, covered with a perfect tangle of tropical trees, shrubs, and climbing vines, making two emerald walls of indescribable loveliness. Occasionally a limestone rock crops out, assuming fantastic forms, once like an old Spanish fortification, and again forming *las tiendas*, an exact imitation of the stores of this country, even to the barred doors and windows, which were perfectly represented by leafless vines stretching across portions of the rock. The river is very winding, and every turn reveals new beauties. Once it makes a perfect elbow, called

'The Maiden's Turn', and often bends so sharply that there is no passage visible. To enhance still further the enjoyment of this scene, we were sailing under the blue sky of the tropics, and in the midst of such peace and quiet as are found in the haunt of nature only. The puffing of the steamer and our own voices were the only sounds to be heard; and an occasional Indian canoe gliding noiselessly by, or the flight of some startled bird, were the only signs of life. Leaving the cañon, the river suddenly broadens out into the 'Golfete', three or four miles wide and about fifteen miles long."—Helen J. Sanborn's *Winter in South America*.

of the capital, centre of a coffee-growing district, once the "Land of War", to which Las Casas and his companions gave for a new name, "*Vera Paz*". The plateau, hollowed by Lake Peten and other basins, in the north-western projection of the republic running up beside British Honduras, remains much of a blank on maps, its Mexican border still held by a race of intractable Indians.

Guatemala has a good deal of leeway to make up in the course of prosperity; but the United States residents, who now take

a leading part in its commerce and development, may be trusted to supply an impetus. Its staple productions are coffee and fruit; and Americans are now seeking to exploit a neglected store of minerals. An effort has been made to meet the long-standing default in both principal and interest of its foreign debt, while the Government undertakes to introduce a silver, eventually a gold, standard of money; but it seems significant that the Guatemalan paper dollar has been worth in late years rather less than three-pence.



The Market-place, Atitlan, Guatemala

A. F. Maudslay

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The World of To-day

HONDURAS

This, the most backward and poor of the Central American republics, has only a name in common with British Honduras, from which it is cut off by a strip of Guatemalan coast. The name means "shallows", char-

acteristic of a shore that is prolonged by the submarine Mosquito Bank for more than 100 miles towards Jamaica. The Atlantic seaboard, a continuation of the Mosquito Shore from Cape Gracias à Dios and the

large Caratasca lagoon, chiefly faces northward to Cuba, belted by many small islands on the deeply-indented Gulf of Honduras. On the south the country touches the Pacific by the Gulf of Fonseca, bristling with volcanic peaks and islands. The little-known interior rises into mountains which at one point appear to be 10,000 feet high, beyond which lies a great central table-land, the chief site of settlements, while the forests are given up to Indians. Near the west side is the considerable basin of Lake Yojoa, draining northwards to the Gulf of Honduras, chiefly by the Ulua River. The whole area is about 46,000 square miles, almost as large as Guatemala, with a population of only half a million, more or less, chiefly Indians, negroes, and Zambos, a cross between black and red skins.

Still more than its neighbours, Honduras has gone back both in population and in prosperity since the day of the Spanish viceroys, who at least kept some kind of order. It has great and varied resources, a variety of medicinal



A. P. Maudslayi

Sculptured Column, Copan, Honduras

Copan was once a great Indian city, whose remarkable ruins and richly-sculptured monuments are referred to in detail in the foot-note on opposite page.

plants, vegetable silk, as well as cotton, rubber, sugar, coffee, and cocoa; then, thanks to its different levels, "the pineapple and the palm tree are growing within two hours' ride of waving wheat-fields, while orange- and apple-orchards stand within sight of each other". There are harbours and navigable water-ways, little used; and the mines came to be neglected, though Honduras is believed to be specially rich in minerals. On the inland highlands cattle are a good deal bred for export. The whole country seems doubly cursed by indolence and by fits of energy misapplied in civil wars. Yet it succeeded in getting into debt for more than £5,000,000, quadrupled by the interest on permanent arrears that have been running on for half a century.

The most flourishing part seems to be a strip of the Atlantic coast on which American enterprise is engaged on the cultivation of bananas and coco-nuts, that now supply the chief export. A small private railway has been made here on behalf of this industry. Long ago a transcontinental line was planned to cross the country; but only a bit of this has been constructed from

Puerto Cortez on the Atlantic to the inland town of San Pedro Sula, whence it is being slowly extended towards Amapala, the port on the Pacific side. Other harbours on the Atlantic coast are La Ceiba, Omoa, and Truxillo, the last no longer its chief port.

The old capital was Comayagua, on the central table-land, which has a fine cathedral, sorely battered in ruinous revolutionary struggles, and near it a monument to a Spanish king, thriftily adapted to commemorate the Independence that has cost these republics so dear. The principal city is now Tegucigalpa, which stands farther towards the Pacific in a grand amphitheatre of mountains; but this contains only some score thousand people or so in its smartly-painted houses and grass-grown streets. It is noted as the birth-place of Morazan, the Bolivar of Central America, who also was distrusted, overthrown, and exiled by fellow-citizens unworthy of the freedom he fought for. Within Honduras, near the Guatemala frontier, lies Copan, that once great Indian city, whose remarkable ruins and richly-sculptured monuments were first made celebrated by Mr. J. L. Stephens.¹

¹ "We ascended by large stone steps, in some places perfect, and in others thrown down by trees which had grown up between the crevices, and reached a terrace, the form of which it was impossible to make out from the density of the forest in which it was enveloped. Our guide cleared a way with his machete, and we passed, as it lay half-buried in the earth, a large fragment of stone elaborately sculptured, and came to the angle of a structure with steps on the sides, in form and appearance, so far as the trees would enable us to make it out, like the sides of a pyramid. Diverging from the base, and working our way through the thick woods, we came upon a square stone column, about fourteen feet high, and three feet on each side, sculptured in very bold relief, and on all four of the sides, from the base to the top. The front was the figure of a man, curiously and richly dressed; and the face, evidently a portrait, solemn, stern, and well fitted to excite terror. The back was of a different design, unlike anything we had ever seen before, and the sides were covered with hieroglyphics. This our guide called an 'Idol', and before it, at a distance of three feet, was a large block of stone, also sculptured with figures and emblematical devices, which he called an altar. . . . With an interest perhaps stronger than we had ever felt in wandering among the ruins of Egypt, we followed our guide, who, sometimes missing his way, with a constant and vigorous use of his machete conducted us through the thick forest, among half-buried fragments, to fourteen monuments of the same character and appearance, some with more elegant

designs, and some in workmanship equal to the finest monuments of the Egyptians; one displaced from its pedestal by enormous roots; another locked in the close embrace of branches of trees, and almost lifted out of the earth; another hurled to the ground, and bound down by huge vines and creepers; and one standing, with its altar before it, seeming to shade and shroud it as a sacred thing. In the solemn stillness of the woods it seemed a divinity mourning over a fallen people. The only sounds that disturbed the quiet of this buried city were the noise of monkeys moving among the tops of the trees, and the cracking of dry branches broken by their weight. They moved over our heads in long and swift processions, forty or fifty at a time; some with little ones wound in their long arms, walking out to the end of boughs, and holding on with their hind feet or a curl of the tail, sprang to a branch of the next tree, and with a noise like a current of wind passed on into the depths of the forest. It was the first time we had seen these mockers of humanity; and, with the strange monuments around us, they seemed like wandering spirits of the departed race, guarding the ruins of their former habitations. We returned to the base of the pyramidal structure and ascended by regular stone steps, in some places forced apart by bushes and saplings, and in others thrown down by the growth of large trees, while some remained entire. In parts they were ornamented with sculptured figures and rows of death's-heads. Climbing over the ruined top we reached a terrace overgrown with trees, and, crossing it, descended by stone steps into an area so covered with trees that at

SALVADOR

Wedged in between Honduras and the Pacific, this, little larger than Yorkshire, is the smallest of the Central American republics. At the same time it is the best populated, with some million and a half of people, who, according to that shrewd critic, Mr. W. E. Curtis, are rather more active and enterprising than their neighbours. He attributes this fact to Salvador's having been the first of these States to shake off the domination of the sleepy Church, and to a higher state of public morals, connected with a political regulation which gives the suffrage freely to married men, while bachelors must be qualified by property or education. This little republic set the example of rebelling against Spain, and at the outset of her career was for offering herself to the United States, but became drawn into the temporary Federation of Central America. Since its dissolution, Salvador has had a fair share of local revolutions, which, however, have not prevented the inhabitants from attending to agriculture and even to manufacturing industry. A special product is the so-called Peruvian balsam of the forests on the coast-line, still inhabited by a notable Indian tribe, who seem peculiar in having a keen eye to this business, by which the community is believed to make a good deal of money, while the naked individuals have not a pocket to put it into. Indigo was once

first we could not make out its form, but which, on clearing the way with the machete, we ascertained to be a square, and with steps on all the sides almost as perfect as those of the Roman amphitheatre. The steps were ornamented with sculpture; and on the south side, about half-way up, forced out of its place by roots, was a colossal head, evidently a portrait. We ascended these steps, and reached a broad terrace a hundred feet high, overlooking the river, and supported by the wall which we had seen from the opposite bank. The whole terrace was covered with trees; and even at this height from the ground were two gigantic ceibas, or wild-cotton trees of India, about twenty feet in circumference, extending their half-naked roots fifty or a hundred feet around, binding down the ruins, and shading them with their wide-spreading branches."

a good deal grown, but became not so profitable through the competition of aniline dyes. Salvador, with a currency in dollars of which about a dozen go to a pound, has the credit of paying the interest on her small debt; and another peculiarity among these Isthmus republics is her facing only on the Pacific, to which runs her chief river, the Lampa, flowing out of Honduras. It is no peculiarity that the president of this republic lately came to be assassinated.

The country consists mainly of healthy uplands shut in between an interior mountain range and a line of volcanoes, many of them still active, along the lowland edge of the Pacific coast. One of these volcanoes, Izalco, is of modern birth, thrown up suddenly in 1770, rising in a few weeks to 4000 feet, and now twice the height of any English mountain. It is still growing through its regular pulse-like discharges, every few minutes, in a column of fire, smoke, and ashes seen far out at sea, so that this mountain has the by-name "Lighthouse of Salvador". Another active peak is named San Miguel, from the patron saint of the State which has suffered sorely from such infernal furies. In 1910 several islands on the coast were engulfed, their inhabitants drowned by hundreds.

San Salvador, the original capital, a few leagues from the sea, stands among nearly a dozen cones, most of them luckily now extinct or quiescent; but the city has been over and over again wholly or partially destroyed, always rebuilt by its inhabitants (60,000) in a plain style, hinting at the precarious value of house property here.¹

¹ "Some six miles eastward of the capital lies Lake Leopango, which was the scene of one of the most remarkable volcanic disturbances . . . in December, 1879, when the surface of the lake rose suddenly about five feet, causing the Rio Jiboa, which flows out at the south-east corner, to transform itself from a slowly-moving shallow stream into a foaming rapid some forty feet deep. This sudden egress of water, estimated at thousand of millions of cubic feet, caused a corresponding drop in the level of the lake, which



The "Lighthouse of Salvador": one of the craters of the Izalco volcano

Izalco is a "self-made" volcano, whose under-covered peak, now twice the height of any English mountain, has been built up from its own discharges. During its long periods of activity, the eruptions, occurring every few minutes, are remarkable for their pulse-like regularity. At night, the overhanging smoke is lit from below by the molten mass in the crater, and this flashing effect, which can be seen far out at sea, has given to the volcano the nickname which it bears.

In 1917 it was again destroyed by a far-spread commotion. The seat of government was moved, for a time, to Santa Ana, rather farther inland, a place nearly as large and more likely to thrive as less exposed to volcanic disturbances. Both these cities are connected by rail with Acajutla, the chief port, others to the east being the less con-

venient landing-places of La Libertad, then La Union, on the Fonseca Bay, harbour for the neighbouring city of San Miguel, as La Libertad is for one named New San Salvador. There are several other inland towns, as to whose population accounts vary hopelessly, statistics in Central America being often imaginative.

subsided about thirty feet in the same number of days. This phenomenon was accompanied by violent convulsions of the earth, and subterranean explosions which shook the capital and the whole centre of the country. Contemporaneously, poisonous vapours were emitted from its centre; a volcanic cone, surrounded by numerous islets, rose about the seething cauldron; then came the fire, the

lava, and the ashes, a conflagration that lit the mountains for miles around, and darkened the sky all over Salvador. When all was over, an island of solid lava some 160 feet high remained in the centre of the lake; the waters resumed their natural level; but the shocks had destroyed nearly all the buildings in the city of San Salvador."—Mr. C. W. Domville-Fife's *Guatemala and the States of Central America*.

NICARAGUA

This claims to be rather the largest of the Central America States, nearly 50,000 square miles, and it might also boast to be the one that has made most noise in the world, yet it has not much more than half a million inhabitants, where measurements and countings are hardly to be depended on as accurate. A good part of its surface is water, the beautiful Lake Nicaragua in its south-western corner being 100 miles or so long, studded with many islands and more than one active volcano. To the west of this basin, and of the smaller Lake Managua north of it, lies a highly volcanic region whose rich soil is the best-settled part. In the centre swells up a line of mountains several thousand feet high, whence flows eastward the Segovia River, dividing between Honduras and Nicaragua the promontory ended by a cape which Columbus named *Gracias à Dios*, as thanks to heaven for its shelter from boisterous winds. A rib of the mountain backbone is interesting because its name *Ammerique* has been supposed to have gone to christening the continent through a resemblance to the name of Amerigo de Vespucci; but this is a doubtful question not now likely to be settled. The western face of the central mountains is usually more abrupt; on the other side they descend by terraces and spurs to the flat forests of the Mosquito Shore, which makes a distinct zone of the republic.

This eastern face is edged by orchid-wreathed mangrove beds, coco-nut palms, sand-banks, and coral cays, where the shore is always being pushed out from the deltas of its often-flooded rivers interlaced by lagoons that, with occasional portages, make a calm water-way almost all along the coast. The Mosquito Shore seems to have an undeserved bad name, the sea-winds doing much to clear off swampy exhalations. Mr. C. N. Bell, who was brought up on it, tells us that at one time its best port, Bluefields, was looked on as a sanatorium for Jamaica.

Even mosquitoes, he says, are not so numerous as might be expected on a damp tropical coast, though he admits a variety of stinging flies to plague man and beast. Of the Indian and black inhabitants, who were his naked playmates and hunting companions, he has little but the friendliest memories, and gives lively pictures of a life which must have been a paradise for healthy boys, in and out of the water all day long, with the chance of coming across a shark or an alligator as zest to their amphibious gambols.

Bluefields, though some years ago devastated by a fire, thrives as port of a fruit-growing region up its Escondido River, where a railway is proposed. Its name is a survival of the former irregular and intermittent British protection of this coast, with the result of wranglings that once had nearly cost us Nelson, invalided on an expedition into the interior. When the power of Spain went to pieces, our authorities set up a native "king" as chaperon of a power which they pushed along the coast to Greytown, said to be the wettest part of Central America. Somewhat unwillingly we withdrew, giving up the Mosquito Shore to be shared between Honduras and Nicaragua; the native royal family, with its high-sounding names, "George Augustus Frederick" and such-like, being left to drink itself extinct on a pension, and the crown with which we furnished it falling in pawn to a Yankee trader. With Nicaragua is now incorporated the southern stretch; and Greytown has been rechristened San Juan del Norte, where a new harbour was the first step to a proposed Nicaraguan Canal; but this port seems to be declining, its entrance blocked by a dangerous bar. At present the trade of the region is chiefly in bananas, rubber, and the mahogany that grows in the thick interior forests; but it is said that gold can be washed out of the streams. The black inhabitants of such



The Main Street, Bluefields, Nicaragua

Underwood & Underwood

towns as Bluefields were left under the influence of Moravian missionaries, who must feel themselves somewhat *dépayés* as Nicaraguan citizens. Repeated attempts at settlement here by Europeans of different nations have ended disastrously.

The Mosquito Shore, or that northern part of it known as Poyais, was scene of a once-resounding enterprise started by Gregor Macgregor, one of Bolivar's lieutenants, who in intervals of serving Venezuela indulged in fighting for his own hand. At one time he took possession of Amelia Island on the Florida coast, but fell out on the question of slavery with a crew of southern desperadoes whom he got together. His next appearance was in London as promoter of an attempt to imitate the unfortunate Darien colony. Claiming to have received a grant from the native king, he assumed the title Cacique of Poyais, as he had already dubbed himself Sir Gregor, in virtue of an order of Venezuelan chivalry. For a time his project made no small noise, faintly re-echoed for us in the *Ingoldsby Legends*:

Gregor Macgregor, Cacique of Poyais,
A country where silver 's as common as clay.

At his office on Dowgate Hill, E.C., he issued bank-notes, commissions, and titles of nobility, signed "Gregor P.", but he was less successful in an attempt to float a loan on the London Stock Exchange. A number of unfortunate Scotsmen actually went out to Poyais under his auspices, but with no more success than had the Darien colonists. The "king" repudiated or denied his bargain, and the immigrants found themselves starving in an Eden like that of Martin Chuzzlewit. Most of them died before being rescued by the British authorities of Honduras; then the vainglorious Macgregor's name gathered much obloquy through a disaster which he did not personally share, as he remained in London appointing colonels and admirals for his bubble State. Yet there is reason to believe that, if more prudently carried out and well backed up, such a colony might have successfully established itself.

A generation later another adventurer

went into Central American filibustering, and did not want a *vates sacer* in the person of the poet Joaquin Miller. This hero, William Walker, is said to have also had Scottish blood in his veins, though born an American. Doctor, lawyer, and a journalist by turns, he seems to have had an incurable propensity for lawlessness. After trying his prentice hand at revolution in California, he led a gang of swashbucklers to Nicaragua, where, by assisting one party against another, he rose to brief supremacy. But his meteoric career was, as even his admiring bard and follower admits, "maybe through too much of blood"; his high-handedness provoked a revolt, and the neighbouring States united to drive him out. After burning the city of Granada, he surrendered to the United States authorities, then escaped, was retaken, released, re-arrested, tried by the laws of his own country, and acquitted. But, finally, returning to stir up fresh violence in Honduras, he was captured and shot, not much regretted by a century for which the romantic character of Conquistador requires to be put into distant perspective. "Half angel and half Lucifer" is Joaquin Miller's account of him, adding that he was "tall, courtly, grand as any king"; but it shows the difficulty of writing even recent history that C. N. Bell, who visited his camp, describes this modern Pizarro as "a little strip of a man, about 5 feet 3 inches high; and I wondered to see him in command of these stalwart Kentuckians and tall Germans".

Almost all the white population of Nicaragua is upon its Pacific side, most of its cities being strung out along a railway which, between the volcanic mountains and the central heights, runs from the port of Corinto to Lake Nicaragua, where steamers have begun to replace clumsy "bungeoes" and canoes. Managua, on the lake of that name, is now the capital, as once was Leon, farther north, still the largest and busiest city, with a population which some accounts put at 60,000. It is one of the oldest of Spanish-American cities, and has dilapidated monuments of its former greatness,

as had Granada, still more destroyed by civil wars. Granada is about as large as Managua, which seems to have 30,000 people. This was finally chosen as capital because neither of the older cities would submit to the other's supremacy. Matagalpa, high among the mountains, is reported as one of the most go-ahead places; and Rivas, between Lake Nicaragua and the sea, is also of some note. There are one or two more towns of 20,000 or so.

The fact of a thin population being gathered so much into towns is a hint of the weakness brought about by chronic civil wars, engendering a state of insecurity and deeds of violence that have dotted the landscape with crosses, at which pitifully pious travellers dismount to offer a prayer for the soul of the slain man, with the certain result of frequent but not uncongenial delays on their own journey. In spite of their quarrelsome politics, the Nicaraguans are described by Mr. W. E. Curtis as unusually sociable for Central Americans. The great annual holiday of the townsfolk is a fortnight's general picnic on the sea-shore, when bathing goes on in the "fearless old fashion", and Cupid is much of the merry parties. This "feast of St. Venus" is said to be a survival of an old Indian custom.

The west side of the country has suffered much through earthquakes and eruptions, that every now and then set the Nicaraguans for once in a hurry. From the top of Leon's cathedral, a fine building that has often been turned to account as a revolutionary fortress, can be counted more than a dozen volcanoes, some of them still active, though every year, on the anniversary of their last eruption, a priestly procession ascends to baptize the craters with holy water in the hope of keeping them quiet. Such a ceremony, however, has not yet been accomplished upon Momotombo, the grandest and fiercest of these vents, which appears to be inaccessible, and three monks who set out to seal it with a cross were never heard of again. This fearsome volcano is one of several that rise above Lake Nicaragua, its cone copied in miniature by the island

Momotombita, a long-extinct crater, whose forests hide temples and rock-hewn idols as relics of native superstition. In 1835 there was a terrible eruption of Cosequina, near Granada, which laid land and sea far around under ashes, wafted 1500 miles away to Bogota in Colombia and to the West Indies, a clear case of nature's carrying coals to Newcastle. What with one and another calamity, Nicaragua seems to have gone down in the world since the seventeenth-century days when Thomas Gage could describe it as the "Paradise of America".

Lately, as indeed all along, it has been much shaken by political commotions. Its Government was seized by a truculent tyrant named Zelaya, who proclaimed himself perpetual dictator, and is said to have announced: "I mock at Germany, I laugh at the United States, and I spit upon Eng-

land!" One significant result of his rule was the paper Nicaraguan *peso* sinking in value to about a twelfth of the United States dollar. His blustering oppression became so unbearable that in 1909 there was a rebellion that drove him from the country. Continued disturbances led to the dispatch of United States troops to protect American residents; and the Washington Government had a mind to take Nicaragua in charge with the view of preventing any other Power acquiring rights to construct a canal here as a rival to that of Panama. This unprecedented attempt at interference was resented by many in the States, and still more strongly in Nicaragua itself; but it has resulted in a kind of semi-protectorate guardianship. The volcanic republic seems at present quiescent under a president who is a namesake of the ex-ruler of Mexico, Diaz. *Absit omen!*

COSTA RICA

The whole western shore of the Caribbean Sea, which barred Columbus from his supposed passage to the Indies, was at first known as the 'Rich Coast', but the name came to be restricted to this little State, twice the size of Belgium, with a population of about 400,000. Through it runs a backbone chain of mountains, whose valleys and table-lands have at once a rich soil and a healthy climate. From almost a central point two rivers flow down to either ocean, their courses marking a gap that was once a strait. The other streams turn chiefly northward into the great Lake of Nicaragua, or into its outlet the San Juan, that makes a border line with Nicaragua. The Pacific coast, more salubrious and less thinly settled than the other side, throws out two curved peninsulas enclosing deep inlets known as the Gulf of Nicoya and the Gulf of Dolce, the latter near the edge of Panama. In the former is Punta Arenas, chief port of the Pacific side, as is on the opposite coast Puerto de Limon, so named by Columbus

from the lime trees of islands in its feverish harbour.

Between these ports a railway passes over the mountains by the two principal inland cities. Cartago was the old capital, which has more than once been ruined by its volcanic neighbour Irazu, as in 1910 by a massacring earthquake; so the seat of government was transferred to San José, renowned for its beauty among the cities of Central America. But in its high and healthy valley, San José too seems by no means safe, being shut in among a group of volcanic craters that from time to time give a hint of their activity; and if all of them fall suspiciously quiet at once, the people look out for an earthquake.

Not long ago Costa Rica treated itself to a revolution, but politically it has been fairly stable, as compared with its neighbours, so it was fitly chosen as seat of the Central American Court of Arbitration, for which Mr. A. Carnegie supplied funds to build a "Palace of Peace" at Cartago. One revo-

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lution, a generation ago, was headed by the cowboy Thomas Guardia, who could neither read nor write, but who turned out a clever ruler, though he rather bungled the railway-making that has saddled the country with a heavy debt. Under him the Church became disestablished, the monasteries confiscated, and steps were taken towards national education, carried out by compulsory schooling and a university at San José. If not yet up to a high standard of learning, the people are courteous and intelligent; and the lower class seem to be honest, and to have sense enough not to meddle much with politics. They show typical Hispano-American weaknesses, as for putting off till to-morrow and in entertaining a dread of cold water. But they have welcomed foreign immigration and capital; they are now trying to pay interest on their debt; and there are a considerable number of strangers in the country, among them pushing North Americans much

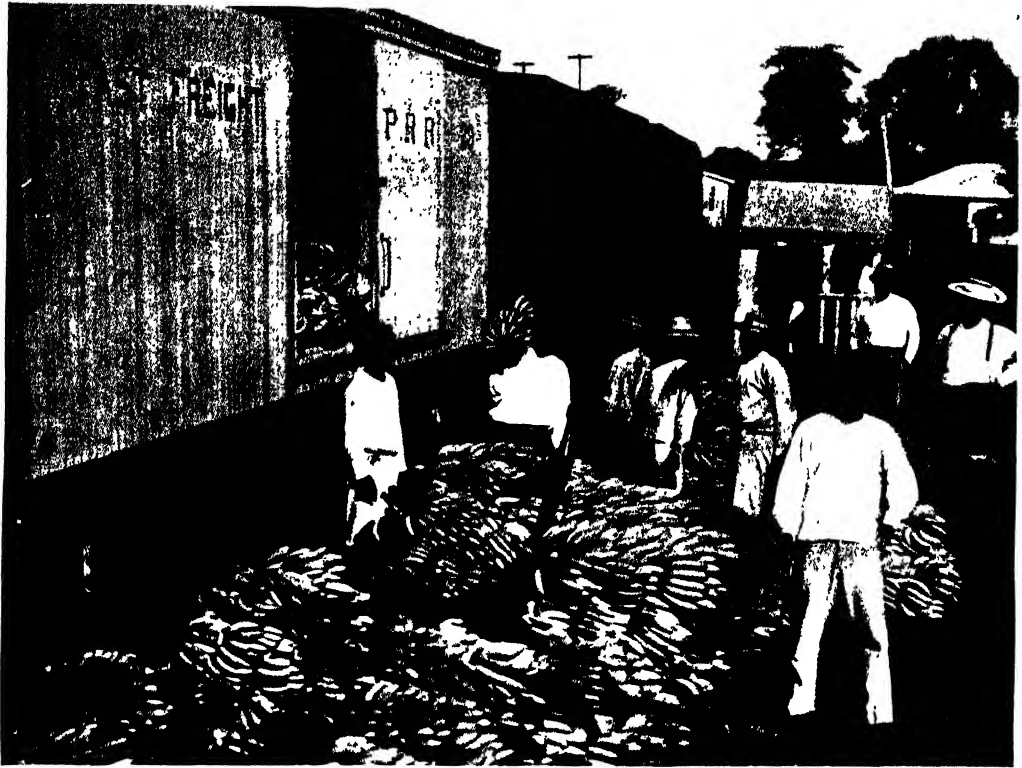
engaged in supplying the United States with bananas. Coffee is else the most valuable crop.

There would seem here to be a good field for settlement, as land can be had on cheap terms from the Government, and the fertile uplands are perhaps the healthiest tropical abode for white men. The hot lower grounds on either side are also very productive in their way; then the country has great forests of timber, extensive grazing-grounds, and mines long neglected. None of its resources are yet fully drawn upon, some hardly examined; but with lively new blood brought into it, this little republic may yet justify its name for richness. If not the most picturesque, it seems the most progressive State of Central America; and there has been talk of uniting its fortunes to those of its neighbour Panama, now taken under the wing of the United States.

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A Group of Coffee-pickers, Costa Rica



Loading Bananas for Export, Panama

Underwood & Underwood

PANAMA

The State so called measures rather over 30,000 square miles in area, with a double coast-line of 400 miles, and a population of under half a million, plus the foreign colony engaged upon the canal. What has mainly drawn the eyes of our generation on this neck of land is the question of piercing it, to open a waterway between the two great oceans, as was suggested so far back as 1550; but all along it has been much in the world's eye, since the day when Spanish adventurers first

Looked at each other with a wild surmise—
Silent, upon a peak in Darien.

The sickle-shaped Isthmus of Panama is narrowest point of the whole bridge between

North and South America. It is cut off from South America by the valley of the Atrato and by the Gulf of Darien, which gave the isthmus its older name, more familiar when, at the end of the seventeenth century, Scotland was half-ruined by the failure of an ill-planned colony established here by William Paterson, another of whose schemes, the Bank of England, had better fortune. At the beginning of our century Panama, with some 250,000 people, made one of the departments of Colombia, treating itself to an attempt at revolution, or at least a riot, every year or so. In 1902 such a chronic demonstration easily brought about independence through prompt encouragement, if not instigation, of the United States, concerned to protect the railway and canal

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works from the chances of civil war, and disgusted by the conduct of Colombia in hanging back from an arrangement under which the richer Power took upon itself the completion of an enterprise much to their common interest.

This strip of land has a broken backbone of mountains, rising to over 11,000 feet in extinct volcanoes, but sinking so as to offer passes of a few hundred feet between the two oceans, whose waters at one point are hardly a score of miles apart. The mountains, however, have such a confused extent, on this crooked area, that its chief streams flow for part of their course parallel to the coasts, while their chronic floods under heavy rain make them an obstacle rather than a help to navigation. This is the case with

the Chagres River, in the centre, occasionally threatening to destroy the first trans-continental railway that for more than half a century has linked the commerce of the Atlantic and Pacific. The low shores are often swampy and feverish; but there are stretches of more healthy upland, on which cattle-farming can prosper, as about the new town of David on the Pacific side, to which a railway is advancing, while the improved Atlantic port Bocas del Toro flourishes through the enterprise of the American United Fruit Company.

The chief Atlantic port in Spanish times, after the destruction of the older Nombre de Dios, was Porto Bello, at the northern point of the isthmus, scene of a lively fair during the fortnight's stay of the Spanish plate-fleet, lodgings and food being at ransom prices, and hundreds of men dying in what one impatient sojourner was for renaming Porto Malo. It was the triumph of Admiral Vernon's capture of Porto Bello in 1739 that made its name not unfamiliar in Britain. This port is now decayed, as is Chagres, at the mouth of its river to the westward. Between them sprang up the new port, which, its English name Aspinwall soon withering, the Spaniards call Colon after Columbus, whose fine statue here seems a mockery in the representation of him as cherishing and protecting a naked native. The other most striking sights of Colon are its many drinking-bars of all classes. It is a bad harbour, and a hot, reeking town, with a heavy rainfall, where hygienic science now struggles with fever, largely due to the reckless habits of the people, who are a kind of international medley brought here by the railway and canal works, negroes from the West Indies being a chief element. An oasis in its slums seems the American suburb of Cristobal; and a fire that in 1915 destroyed half the city gives it a chance of a new start under better auspices.

Most foreigners arriving at this haven used to hasten to get out of it, as they could do by taking the Trans-Isthmian railway, every sleeper on which is said to have cost a man's life, so deadly proves the first effect



Underwood & Underwood

Native Life in a Village in the Interior of Panama:
pounding rice



In Cristobal, the American Suburb of Colon, Panama

of turning up tropical virgin soil. At first built on piles across a swamp, the line rises on to rather higher ground, where, among the low hills, a few clearings are with difficulty kept from being swallowed up by the jungle, and rotting sheds and rusty machinery have marked the first suspended canal works. Now sighting the River Chagres, with its unruly floods, now the gigantic trench by which the canal is carried through the pass, the train descends to the Pacific coast-strip where stands Panama. Sir Martin Conway's experience was to enter the station between two lines of men shooting at each other; then the passengers had to disperse under fire and hide away as best they could till the game of revolution was played out.

Panama was no better in point of health, of old known as a white man's grave, where many a traveller has been buried the day

after his arrival. At least this is an ancient and picturesque city, with a stirring history. A few miles to the east is the site of Old Panama, burned by Morgan the Welsh buccancer. The city that succeeded this has seen many a scene of violence, but preserves its fine cathedral and other relics of dignity among solid stone houses with deep wooden balconies. Its decayed fortifications overlook a beautiful bay starred by islands, one group of them named from their pearls; but few travellers cared to linger on this scene an hour longer than they could help. The arrival or departure of a steamer woke Panama for a moment from its sleepy air. Twice in modern times it has had a fever of activity: in the early days of the Californian gold-diggings, to which this was then the shortest road; and again during the pushing period of the French canal works that once more flooded the

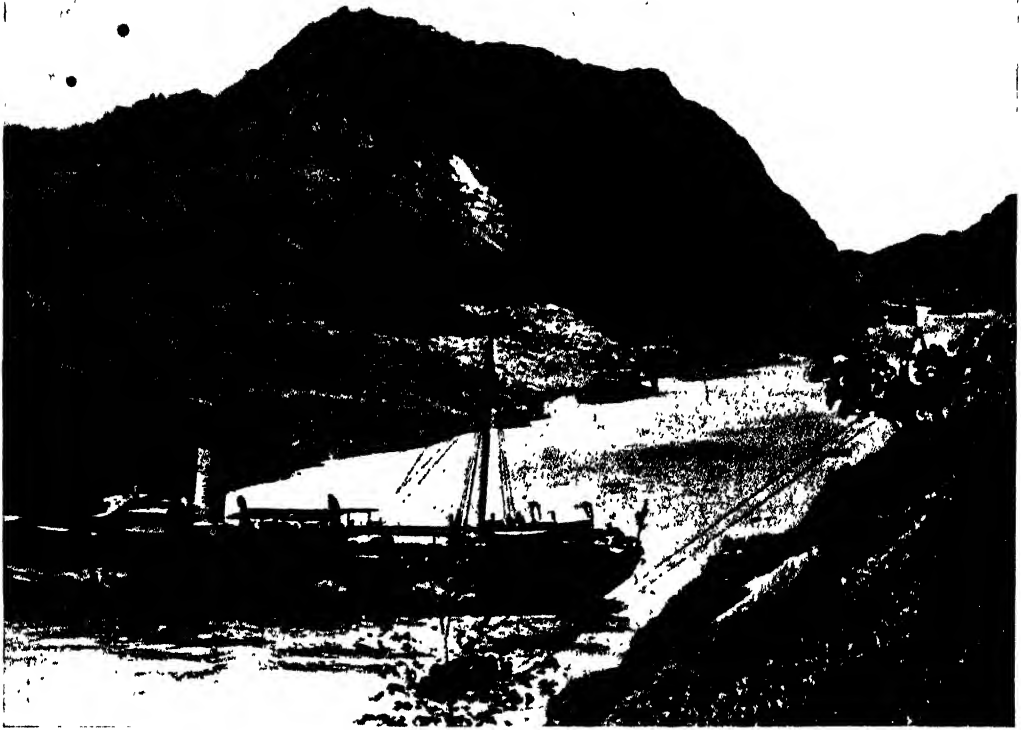
isthmus with debauchery and extravagance; and no doubt the habits of transient visitors helped to exaggerate its reputation for insalubrity. It had about 20,000 inhabitants, including Chinese, gipsies, and Levantine "Turcos", who of late find their way to this part of the world. Now a new American town is springing up at La Boca, *alias* Ancon, or Balboa, the mouth of the canal, which runs across the crooked isthmus from north to south, Panama actually lying a little east of Colon, as Edinburgh is west of Liverpool.

Here we come to that famous cutting of the isthmus, "the greatest liberty man has ever taken with nature". Several schemes had been proposed, and in our time two were set on foot. One of these, to some extent carried out, was the Panama Canal that swallowed up so much of the savings of French industry. The other was the Nicaraguan route, at one time furthered by the United States, and hindered by international complications as to a guarantee for its neutrality. This scheme aimed at utilizing Lake Nicaragua, and, in part, the course of the River San Juan, which carries its water to the sea, and already, with some hitches through rapids and shifting banks, is navigable by small steamers. Out of a whole length of 170, only about 30 miles of channel would here have to be formed by means of cuttings and locks. But a serious difficulty appeared in the providing of good harbours at either end; then at the height of the low divide there would be nothing for it but hewing through solid rock, while it remained to be seen how far the gigantic works necessary could hold their own against earthquakes. The Panama cutting is through softer though rather higher ground, 300 feet at the highest point, and the distance is not nearly so great; but it had to deal with pestilential swamps, dank forests, and frequent floods that cost an enormous loss of life as of money. In 1881 a French company was formed to carry out this scheme, and soon got to work. But its guiding spirit, M. de Lesseps, had been too sanguine in calculations based upon his successfully excavating the flat sandy Isthmus

of Suez. His original idea of a sea-level canal proved impracticable, and the more costly plan of locks had to be substituted. The resources of the company were undermined also by corruption and intrigue at home. Further capital proved necessary, which could not be raised, and after a few years the undertaking collapsed with a far-resounding scandal that ruined prominent reputations in France.

Next, the United States stepped in to take up the unfinished work. It entered into slow and difficult haggings with the owners of the land, the bankrupt Republic of Colombia. This Gordian knot was cut by the opportune local revolution that restored to Panama its independence. Uncle Sam hastened to recognize the new republic, to make a bargain with it by which it became a practical dependency of his, and to let it know that no more revolutions were to be allowed to spoil his plans. For a payment of £2,000,000 Panama gave up to his management a zone of 10 miles broad running obliquely across the isthmus, in which he should be free to carry out the work while keeping an eye on the welfare and stability of the whole country, set upon its financial legs with a new currency of silver dollars equal to just over half the American dollar, here represented by the "balboa" on a gold basis. The slow-going Panama people welcome the money thus brought among them, but are not so well pleased with the hustling ways by which the predominant partner looks after their interests and his own.

Then came all sorts of difficulties and delays, after the American engineers had decided on a lock canal. Red tape, in use at Washington as at other seats of Government, hampered their work, and American "politics" put spokes in the wheels of American energy. The cost was soon found to be greater than had been reckoned on, especially when materials had to be bought at the high prices of a protective tariff. There were difficulties about labour, where white citizens and black ex-slaves will not work together. That was got over by importing an army of our sturdy West Indian,



Underwood & Underwood

The Culebra Cut, Panama Canal: showing a steamer turning round

negroes, well paid, well fed, and working heartily enough after their white overseers had learned that under a monarchy like ours all men really are free and equal, not to be bullied on account of their colour. The officers of this new army were American officials, clerks, and so forth; and all went well after the engineer, Colonel Goethals, was put in absolute command, with Colonel Gorgas as sanitary champion to quell the dragon of fever that had so long guarded the fearsome isthmus, for years killing men off by thousands in this battle with nature.

The line of the canal is about fifty miles long, following mainly the course of the railway. The first difficulty to be encountered was the Chagres River, which, flowing from the centre of the isthmus to the Atlantic, in its sudden floods pours out half as much water as comes over Niagara, and, if left unbridled, would drown and

destroy the works. The American engineers hit on the idea of turning this river into a help rather than a hindrance by storing up its waters in a basin to be used as part of the canal. A mile and a half of strong and thick dam built between two hills has now gathered the boisterous flow into a quiet lake, 164 miles in area, its outlet regulated by sluices and a "spillway" channel at the foot. To its level ships are raised by three double locks, 1000 feet long and over 100 feet broad, to pass through hills and islands on this artificial basin, called Lake Gatun, formed some 85 feet above the sea. On the Pacific side the great obstacle was the height of Culebra, where the ground rose more than 300 feet. Here there was nothing for it but to cut through the hill, a task made slippery by slides and falls of the soft soil, but carried out by the force of machinery and the energy of patient determination.

On the farther side of this already famous cutting the canal descends by a lock into a smaller lake, then two more locks bring it to the level of the Pacific at Ancon. At each end strong breakwaters are formed to protect the entrances, as well as fortifications by which the maker of this canal declares it to be his property. It was to be finished by 1915, but could be practically opened for ships a year or so sooner, the formal celebration being deferred till the summer of 1915. In the first year it gave passage to more than a thousand vessels, the majority of them British; and though now and then temporarily blocked by a landslide, its increasing traffic has made notable changes in commercial geography.

Such a gigantic undertaking could hardly have been accomplished without another great victory of science won alongside of it. The United States officers had to make war upon the unhealthiness that had given this region such a bad name. They found the line of the French advance marked not only with ruinous and overgrown constructions, but with countless crosses set up over the hasty graves of workmen slain by the malarious infection of damp and rank jungles or by the more deadly local plague of yellow fever, taking off, year by year, more victims than would have fallen in a fierce battle. The French surgeon Laveran, then our own countrymen Sir Patrick Manson and Sir Ronald Ross, had been pioneers in disclosing that the poison of these tropical diseases is carried from and to the sick by insects, notably a certain kind of mosquito, whose bite plants the infection to take root afresh. American sanitary students caught at this suggestion, and no heroes of bloodshed have shown truer courage than the doctors, soldiers, and other brave men who volunteered to submit themselves to experiments by which the discovery was made sure. Acting upon it, the late Surgeon-General Gorgas and his staff waged a war of extermination against the mosquitoes by breaking

up their breeding-places, rooting out rotten vegetation, draining swamps and stagnant pools, or sprinkling every damp spot with kerosene oil, which exorcises those tiny foes of our flesh and blood. Not content with clearing the canal zone of insect pests, they took control of Colon and Panama, to clean, drain, pave, and supply with pure water those old dens of fever, to the astonishment and not altogether to the satisfaction of the ignorant and shiftless inhabitants, ready to go on dying like flies rather than take much trouble about living. Thanks to those vigorous measures, the death-rate fell rapidly; and now yellow fever has entirely disappeared across the isthmus, while cases of malaria are so much less common that the whole region can be called fairly healthy. Even if the Panama Canal were to be ruined by the shaking of a treacherous soil, as some critics forebode, the world would be better off for the great experiment in sanitary science accompanying its construction, an experiment so fruitfully successful that tropical cities, once ill-famed as haunts of fever, are now copying it to present clean bills of health. Thus the cutting of this isthmus may indeed be boasted as an epoch-making enterprise, apart from the new channel it opens for the trade of America and the West Indies by such an opening as here Columbus sought in vain.

Here Anglo-Saxon science and energy, as not nature or history, may be taken to have drawn a boundary between the two parts of this double continent. Before entering South America, let it be remarked that if to such a country as the United States less proportionate space has been given than its relative importance might demand, this is because, as in the case of our own motherland, the reader is taken to be more familiar with their general outlines, history, and conditions of life than with the features of petty states, lying under shadows of ignorance and quaking from the chronic commotions that have blighted Central America.



House-building in the Bermudas: sawing blocks of white coral

Underwood & Underwood

THE BERMUDAS

We must not leave North America without a glance at a group of islands which can hardly be reckoned as belonging to any other continent, while in their coral formation and rich vegetation they seem a northern outpost of the West Indies. Lying far out in the Atlantic, hundreds of miles east of the Carolina coast and rather farther north from San Domingo, the Bermudas were known to Shakespeare as becoming by accident one of our earliest colonies. It might seem an assumption of superiority not to follow other writers in recalling how these are the "still-vexed Bermoothes" of the *Tempest*, where Anthony Trollope found extant more of Caliban's than of Ariel's breed. Named originally after Bermudez, their Spanish discoverer, they came to be known also as the Somers Islands, from Sir George Somers, shipwrecked upon them in the beginning of the seventeenth century, on his way to Virginia. This name easily

passed into the Summer Islands, their warm equable climate giving them sleepy charms experienced by two of our poets, Waller, exiled here during the Civil War, and Tom Moore, who held a Government post in the Bermudas, for which he put in a few months' appearance and left a deputy to do all duties beyond drawing his pay, as was possible in those halcyon days of patronage.

Oh! could you view the scenery, dear,
That now beneath my window lies,
You 'd think that nature lavish'd here
Her purest wave, her softest skies,
To make a heaven for love to sigh in,
For bards to live and saints to die in!
Close to my wooded bank below,
In glassy calm the waters sleep,
And to the sunbeam proudly show
The coral rocks they love to steep!
The fainting breeze of morning fails,
The drowsy boat moves slowly past,
And I can almost touch its sails
That languish idly round the mast.

The World of To-day

The sun has now profusely given
The flashes of a noontide heaven,
And, as the wave reflects his beams,
Another heaven its surface seems!
Blue light and clouds of silvery tears
So pictured o'er the waters lie,
That every languid bark appears
To float along a burning sky!

Whatever poets say of them, the Bermudas have a bad name with sailors: Spaniards who never heard of Prospero used to declare that the English occupants must have been helped by their patron, the devil, in raising storms as the Spanish plate-fleet passed by. And, in prosaic truth, the scenery of the islands has a somewhat monotonous prettiness apt to pall even on a bard after his first holiday raptures. More than one visitor is fain to confess that it is easy to grow tired among languorous and highly-tinted charms so soothingly delightful after the rudeness of the Atlantic.

The islands make a British possession, once used as a convict-station, now as a naval dockyard and garrison. There are loosely said to be as many of them as days in the year, the largest joined by causeways, giving extensive drives along their pancake surface, here and there blown into sand-dunes. Strung out for about a score of miles, most of the group are mere uninhabited rocks. The largest of all, called the Main Island, or jestingly the "Continent", is a dozen miles long; and one can walk across it in half an hour. On this stands the capital, Hamilton; and there is another small town on St. George's Island, into which runs a roomy harbour with an entrance so narrow that a passage for large ships had to be blasted out by dynamite. The houses are built of a soft white coral, which, with a liberal use of whitewash, suggest to new-comers from colder countries a recent snow-storm, the last thing to be expected in this soft sunny climate. The prevailing tree is the scrubby pine-like "cedar" of our lead pencils. Mixed with its dark groves, there is a show of palms, oranges, lemons, limes, bananas, large

blossoming oleanders, and other thick vegetation, through which flit birds coloured as brightly as the flowers below. The islands have neither springs nor wells, but there is plenty of rain, on which, collected in tanks, the people depend for fresh water.

The great beauty of the Bermudas is in their narrow winding channels, that sometimes almost cut them in two. These crooked inlets are so landlocked against the waves outside that they form smooth mirrors for the sky above as for the green banks and white houses on their shores. Peeping down into the water, one sees quite clearly the coral reefs and beds of white sand at the bottom, all spangled with gay shells, or "overlaid with a gorgeous natural mosaic" of bright trailing weeds and varicoloured sponges. In this crystal-clear water, the rocks seem to lie much nearer the surface than they really are, so that strangers fear every moment to run upon dangerous points through which the native pilots cleverly steer their way by looking over the vessel's bow. Many of the channels, indeed, are too narrow for the passage of anything bigger than a boat; and here and there stick up ugly wrecks as beacons to caution in threading the maze of coral reefs below and blooming barks above. Among the sights of the island are some fine stalactite caves, shading artificial ponds, in which are stored fish still more gaily coloured than the birds of the cedar groves.

The population, under 20,000, are chiefly blacks, who do not work more than they can help, their main industry the raising of onions, potatoes, and other early vegetables for the American market. British uniforms are very familiar among them, their most frequent visitors being men-of-war and American health-seekers, who here find a soothing refuge from their own sharp winter. If these islands did not lie off main lines of traffic, they might be oftener sought by European idlers, to discover this miniature edition of the Bahamas that proudly boasts its little Legislative Assembly as eldest colonial Parliament of our Empire.

Commercial and Statistical Survey

ARCTIC AMERICA

The Polar Regions

The Polar region of America, north of $66\frac{1}{2}^{\circ}$ N., includes merely the northern fringe of the mainland proper, running at its maximum only about some 500 miles inland from the head of the Boothian Peninsula, as compared with about 750 miles from Cape Chelyuskin. The ultimate limits of the continent are, however, extended far to poleward by the great masses of unknown and ice-covered islands set in the frozen seas of the north.

The interior of the continent slopes gently down to a low and rocky coast broken by occasional stretches of frozen cliffs. The actual coast line is prolonged northward in the bold headlands of Barrow Point, Capes Bathurst and Parry in the west, and the long, low peninsulas of Adelaide, Boothia, and Melville to the east. Wide, shallow gulfs carry the ice-covered waters inland at Mackenzie Bay, Coronation Gulf, Foulke and Committee Bays. Several rivers drain into the Arctic from the northern slope of the Arctican nucleus of the interior with its mineral resources of copper and green malachite. The largest and longest river is the Mackenzie—to the west, flowing in a wide, low plain, and entering the sea by a delta which is gradually silting up the bay. The Coppermine and Backs Rivers to the east have their estuaries north of the Circle.

The northern coast is ice-bound throughout the long winter of these high latitudes, but during the short summer the ice-pack frequently retreats from the shore sufficiently to form an open lane of navigable water. This is due in part to the greater warmth of the season, but more especially to the influence of the warm current which creeps through the Behring Strait from the Pacific and, moving towards higher latitudes, drifts eastwards along the coast. The melting of the frozen grounds drained by the Arctic rivers, and the melting of the rivers themselves, increase the volume of fresh water pouring northward, and these forces, combined with the prevailing wind from the south, tend to push the ice pack from the shore-line. The width of the passage varies considerably according to the direction of the winds and currents, while the season for navigation is short, being limited to about eight weeks from early July to the middle

of September. There is only one harbour of any importance, and this is at Herschell Island, to the west of Mackenzie Bay. The passage along the north coast was the last to be explored, owing to the ice-barriers which generally block the narrow straits, but by the combined efforts of Franklin, Richardson, and Ross the coast was finally discovered early in the nineteenth century.

East of long. 125° W., the Archipelago, which stretches north from the mainland, consists of numerous large islands and groups of smaller islands, forming virtually a *terra incognita*. The islands are separated from each other by narrow straits or sounds usually packed with ice. A series of straits—Lancaster, Barrow, and Melville Sounds—appear on the map to form a through passage, dividing the Archipelago into two sections, but the ice at the narrowest section is reported by explorers to have become jammed into a compact and immovable mass, and bars direct communication by water.

The islands, viz. Ellesmere, Victoria, "Baffin" Islands, are still unexplored except in parts along the coasts. The most northerly point of America appears to be the plateau area of Grant Land, to the north of Ellesmere Island, visited by the Nares expedition of 1875-6, and rounded by Peary in 1909. The Archipelago probably extends still farther northward into the vast undulating ice fields of the Polar Sea, but, while continuous with Greenland, seems to end abruptly west of Cape Bathurst. No land has been sighted in the ice-locked area of the Beaufort Sea, north east of Alaska.

As a rule the Polar seas are covered with drifting ice, forming large floes moving slowly according to a general drift of the tides, currents, and prevailing winds. The tides in the area are, however, very slight, and the currents, though largely convectional, have a general drift to the east. These forces tend to break up the floes and create lanes and channels, while floes impelled together are piled high into ridges. The outlets eastward, viz. Robeson Channel, Lancaster Sound, and Hudson Strait, are narrow and also shallow openings, and quite inadequate as highways for the overflow of ice from the Archipelago, and this natural constriction would account both for the immovable ice barriers which occur,

and for the fewness of the icebergs, and would seem to suggest that the Arctic area of America forms in reality a great basin of accumulated snows in the Polar seas of the north.

Climate

A distinguishing feature of Polar regions as distinct from other zones is the continuous periods of light and darkness, which increase in length from a few consecutive days at lat. 65° N. to six months of light and six months of darkness at the pole.

Insolation is greater in the higher latitudes, but the temperature of the air remains low throughout the year, the length of day being counterbalanced by the greater obliquity of the sun's rays, while the actual heat is expended in melting and evaporation rather than in warming the air.

The North Polar region differs from the Southern in that the lands lie in the lower latitudes of the zone, with the result that the ice-covering, which is so impenetrable in winter, is more or less broken in summer, and actually retreats (as already stated) from the fringe of the continent and frees the coasts of Greenland and many of the larger islands. Though the difference between land and sea is reduced to a minimum in such areas, it remains true that the climate of the islands of the Archipelago tends to be warmer than that on the continent. The lands which are free from snow in the summer have the greatest range of temperature, though the range recorded is not as great in America as in North Asia. On the equatorward margin of the zone, summer maxima of 60° F. and even 80° F. have been registered, while the winter average is well below zero. Western Alaska is somewhat warmer than the eastern mainland, for, as in the case of Norway, its climate is moderated by winds from the warmer Pacific. At Fort Yukon (66° 24' N.) the average winter temperature is about 24° F., and the average summer temperature about 57° F.

TABLE OF NORMAL AIR TEMPERATURES FOR CERTAIN LATITUDES

Latitude	Temperature		Annual
	Jan	July	
65° N.	9.4° F.	54.7° F.	21.7° F.
70° N.	-15.3° F.	45° F.	12.9° F.
80° N.	-26° F.	35.6° F.	1.1° F.
90° N.	-42° F.	30° F.	-9° F.

The relative humidity varies from extremely low away from the sea to relatively high in areas to windward. Snow falls in every month, but the precipitation is light, averaging probably about 15 inches a year. It is most frequent in May and June, and least frequent in November and December. Rain sometimes falls in the summer months, which are also cloudy with frequent fogs, while the winters are clear.

Vegetation

All areas which are ice free in summer support vegetation, even in the most northerly regions. On the level stretches, where the summer thaws produce swamps, mosses and lichens abound and form the typical Tundra kind of vegetation. In better-drained areas, with warmer aspects, large numbers of flowering- and berry-producing plants occur. Wind and evaporation seem to be the controlling factors in the distribution of trees, and the extreme northern limit is about 72° N., where occasionally dwarf willows and birches may be found in sheltered river valleys, e.g. Mackenzie. All the Polar plants have short roots and grow fast.

Fauna

Though the highlands of Greenland and of many of the large islands are entirely devoid of life, animal life is comparatively abundant in and around the Polar Sea. Species of whale, seal, and walrus are found, forming the basis of associated industries in distant areas. The Polar bear probably wanders everywhere. The Arctic wolf, fox, reindeer, hare, ermine still exist. The famous North American musk-ox abounds in Peary Land and the many islands. Molluscs and small crustaceans occur off the coasts. The animals are usually white or change their coats for a shade of brown in summer. There are also many birds—little auk, doves, guillemots, and sometimes duck. These are all migrants who retreat southward in the winter months.

Population

In Arctic America, as in Arctic Asia, the coast-lands of the mainland and of the more southern islands are inhabited by a race known as the Eskimo, i.e. raw-meat eaters, or, as they prefer to call themselves, "Innuits". They are scattered in small groups, and are usually nomadic, but a few permanent settlements are found at special points of vantage for the fisheries, e.g. west of Greenland. The marginal distribution is due to the absence of edible plant life, except in the most southerly regions, and hence the dependence on the fisheries as the main supply of food. The animal life of the Arctic furnishes the Eskimo with meat, and also furs for clothing, tents and boats for equipment, but the hunting season is, of course, limited to the summer months. Owing to the absence of fuel, the cooking is of the most primitive kind, and much of the meat is actually eaten raw. As a rule the "houses", such as they are, are made of the commonest material to hand, i.e. snow or stone. Communication is in winter by sledges over the frozen spaces, or in the curious "kayaks"—small boats made of bone, pieces of driftwood, and hides. (See population under GREENLAND.)

GREENLAND

Greenland extends from about 59° N. to about 83° N. It thus lies well within the Polar regions, while nearly three-quarters of its length is actually within the Arctic circle. Greenland is twice as long as it is broad. The

extension from north to south—from Cape Farewell, the most southerly point, to the Polar coast of Peary Land—has been estimated as 1650 miles, the maximum breadth as about 800 miles, and the total as 827,300 sq. miles.

This great island is separated from the American Archipelago to the west by the shallow passage-ways of Robeson's Channel, Kane Basin, and Smith Sound in the north-west, and southward by the wider waters of Baffin Bay and Davis Strait. To the east, beyond the continental shelf, are the deeper waters of the North Atlantic, which separate Greenland from Europe (with Iceland as a "stepping-stone" between) in the lower latitudes, and from Spitzbergen in the higher latitudes. To the north is the Polar Sea.

Greenland consists of a vast continuous ice-cap entirely covering the interior, and a narrow coastal fringe of headland, fiord, and island.

The ice-cap of the interior, overlying an area of approximately 715,000 sq. miles, is sufficiently thick to obliterate entirely the underlying topographic features. It forms an accumulation of snow and ice congealed into the largest glacier of the north. At an elevation of from 9000-10,000 feet it presents a vast expanse of level surface, varied only by gentle undulations and isolated "nunataks", or projections of bare rock which break the monotony of the never-ending whiteness and the sky-line. The ice-cap of the interior slopes exceedingly gently to the coastal fringe. It is a solid but not entirely motionless block. Impelled by the weight of its colossal mass, it tends to flow slowly outward, and at its margins is broken by great crevasses. In the constricted areas of the valleys and fiords of the coast the ice gathers pace, and finally, as the glacier enters the sea, it breaks and is dispersed in the numerous icebergs characteristic of these northern waters. The snow of the interior never melts, but is smoothed over the surface by the winds. Nearer the coast, though frozen in winter, the snow melts to a certain extent in summer, and the surface-water is carried away by rivers which drop through the crevasses and usually enter the sea as sub-glacial waters. By far the greater part of the coast of Greenland is highly indented and fringed with numerous small islands, the largest of which are Peary Land to the north, and the Disco Island in lat. 70° on the west. Unlike all other countries, both coasts of Greenland, east and west, are characterized by mountains falling to deep fiords and valleys. On the east are the better-known Scoresby and Franz-Josef fiords, about lat. 70° N. and 73° N. respectively. On the west coast is the Godthaab fiord, about 64° N., visited by Nansen in 1888.

The mountains appear to be higher on the east than on the west. The maximum height yet recorded is 7340 feet at Timmucitok, in the extreme south. To northward the mountains seem to decrease in height, falling to 2000 feet, and north of 67° N. are reported as only some 500 feet above sea-level. But high mountains again occur on the east coast, towering 6000 feet between lat. 70° to 75° N. Although the deep fiorded nature of the coast, with its skerry guard, indicates depression, numerous raised beaches occurring at various levels have been observed, and would suggest an uplift at some period.

Climate

The climate of Greenland is essentially continental in character. Though the mean average temperature is always low, owing to the high latitude, great ranges of

temperature, both annual and diurnal, have been recorded from north and south. Conditions are more extreme in the interior than on the coast, and on the east coast than on the west coast. In the extreme south the winter temperatures are comparable with those in similar latitudes in Europe. The summer temperatures are, however, very much lower. This is probably due to the presence of the cold Greenland current which creeps southward from the Arctic ocean along the east coast of Greenland, and renders the climate of the east more extreme than the west, and extends the Arctic conditions farther south. The interior of Greenland forms one of the poles of cold. Though the temperatures recorded are not as extreme as those in Siberia, the cold is more persistent. During the brief summer, where the surrounding areas record temperatures as high as 40° F. the temperature in Greenland appears to remain below 32° F. Over this pole of cold, permanent anti-cyclonic conditions seem to prevail, from which the winds blow towards the coasts.

The diurnal range of temperature may be accounted for in part by the radiation at such elevations. Differences of as much as 40° have been recorded, while in 1896 the thermometer recorded a rise of 67.7° F. in 24 hours at lat. 84° N.

Vegetation

Though the interior is entirely ice-covered, vegetation of the Arctic type flourishes along the coasts during the summer. In the north are the lichens, mosses, creeping dwarf willows, and even such flowering plants as the yellow poppy, pyrola, &c. In South Greenland the vegetation becomes somewhat more profuse, and in sheltered places dwarf birches and bushes occur. Gardening has been attempted with success in the south, and even as far north as Umanak (lat. 70° 40' N.), where brocoli, radishes, and turnips are grown in most years, but at Tarrusak (lat. 73° 22' N.) it has failed. Potatoes, carrots, spinach, and chervil have also been produced when conditions were favourable.

Population

The population, scattered in small groups along the coasts, throughout the 46,700 sq. miles of Danish territory, has been estimated as about 13,449. It fluctuates, however, both with migration and disease. The original Eskimo population has been completely crossed with European stock.

The largest settlement is at Sydproven, with a maximum population of 789 (1920); the smallest is in the north at Skansen, consisting of 46 people.

The majority of the settlements are in the south on the west coast. The most important are Juhanehaab, Frederikshaab, Godthaab, Sukkertoppen, Holsteinborg; and in the region of Disco Bay, Godthaven, Egedesmunde, Retterluck, Jacobshaven, Christianshaab. North of lat. 70° N. is Upernivik. On the east coast is the colony of Angmagssah, established in 1894.

Commerce

The wealth of Greenland is limited, and primarily drawn from the Arctic seas. The total export trade for

1917 amounted to £50,283, the total imports to £44,543.

The exports consist of oil (whale, seal, and shark), furs (white and blue fox, seal), fish (cod, caplin, and halibut), eiderdown, and certain minerals, viz. graphite from Upernivik, cryolite from the Ivigtut district. Iron and coal have been found in the Disco Bay area, but are not worked.

The cryolite is exported to the United States of America for the manufacture of soda. The imports consist of manufactured goods and foodstuffs.

The whole trade is a monopoly of the Danish Government. Prices are regulated, and ships are sent to trade from May to September, when navigation is open.

Government

For purposes of trade and administration the country is divided into Inspectorates—a southern, lying south of 67° N., and a northern, from 67° N. to about 74° N. These Inspectorates are ruled by two governors, with their head quarters at Godthaab and Godhaven respectively, who are responsible to the director of the Government Board at Copenhagen. The Inspectorates are

subdivided into districts, each with its chief settlement in addition to the Eskimo stations, and administered by the local "Udligger", who is responsible to the superintendent. The superintendent is also a magistrate. Councils for local administration also exist, consisting of delegates (one for every 120 of the population) from the stations. The Councils meet twice a year. Their functions are:

- (1) To inquire into and punish crime (which, however, is very rare)
- (2) To relieve the poor.
- (3) To settle litigation.
- (4) To distribute some of the public funds. Five-sixths of the price of goods is paid to the sellers in Greenland, but one sixth is kept back for the public funds.

Religion

The first missionary to arrive in Greenland was Hans Egede in 1721. He settled near Godthaab, and from there began Christianizing the Eskimo. There are now schools and churches in a number of settlements.

ALASKA

Position and Area

Alaska forms the Far North West of the American continent. It is divided from the Yukon territory by the purely arbitrary boundary of long 141° N., and stretches west to within 100 miles of the Asiatic coast in Cape Prince of Wales, long 168° W. Beyond the cape the little island of Diomedé (politically Alaskan) rises from the shallow waters of the narrow Bering Strait, and forms a stepping-stone across the waters separating the two great continents in the extreme north west. The northern coast bends outwards into the Arctic Ocean, the northernmost point being Cape Barrow, lat. 71° 23' N., but the southern coast curves inland (inland fringed) forming the Gulf of Alaska, which is a northern bay of the Pacific Ocean. The extreme south-eastern area of Alaska consists of a narrow coastal extension landward of the main area from Mount St. Elias (lat. 60° N., long. 141° W.) to Cape Muzon (lat. 54° 40' N.), and corresponds to the great seaward extension of Alaska proper in the Alaskan Peninsula. The actual area has been estimated as about 500,000 sq. miles, with a coast-line of 4750 miles, which does not, however, include the many indentations.

Population

The population in 1910 did not exceed .01 to the square mile, consisting of Whites, Indians, Aleuts, Eskimo, and a certain number of Chinese, Japanese, and even negroes. The number of Eskimos has decreased since the contact with civilization, but it is probable this tendency had already begun before the advent of Europeans. Trapping has taken the place of hunting as a main occupation. Juneau is the capital and the largest town, with a population in 1918 of 3500. Anahorage

ranks second in size with 3000 inhabitants. Fairbanks and Nome have from 2000 to 2500, while the other settlements have 1000 or less inhabitants.

Relief

As in the Western United States, the coast ranges of Alaska rise precipitously from the western ocean, islands fringe the coast, and submerged valleys break the outline of the shores.

The mountains of the Aleutian-Alaska Peninsula, Kenai, Chugach, St. Elias, and of the Alexander Archipelago run parallel to the Pacific coast. They are lower to the west and east, but rise to 18,024 feet in St. Elias, formerly supposed to be the highest mountain in America. Beyond the coastal range, and corresponding to the Cascade and Sierra Nevada of the Western United States, are the Alaska Range, with Mount McKinley (or Denali) about 20,300 feet, the highest mountain of the continent, towering above the Susitna lowland, and the Wrangell Mountains with many remarkable volcanoes. Volcanic activity is also marked in the Aleutian Range and round Cook Inlet. In both ranges there are many snow-capped peaks, and glaciers winding down the valleys to the ocean. The glaciers are most numerous between lat. 56° and 61° N. The Malaspina and the Mma are the most famous. In the north of Alaska the Rocky Mountains are continued from the Canadian territory as the Endicott Range, consisting of two ranges about 5000 to 6000 ft., with a general trend from east to west, and a gradual gentle slope northward to the low, wide, and little-known plateau and lowland of the Arctic slope. Between the Pacific ranges of the south and the Endicott Range of the north is the Central Plateau region of Alaska. The elevation varies between 2500 and 3000

feet, but the plateau is broken by low rounded hills and flat-topped ridges, while many streams have carved deep cañons in their courses.

This Central Plateau region forms the drainage basin of the great Yukon River, which rises in Canadian territory to the south east, enters Alaska at about lat. 65° N., and, following a winding course westward, finally reaches the sea by a vast delta. The Yukon River is about 2000 miles long, and receives two large tributaries, the Porcupine, on the right, where the main stream swings north to the Arctic Circle, 145° W., and the Tanana, on the left at 152° W. The main stream is broad and muddy, flowing in a wide valley, and frequently spreading into many channels. Occasionally the valley contracts to a rocky cañon known locally as "ramparts". Though the river is frozen from October to June, it is important as the natural high road of the region, and is navigable for small craft nearly to the head waters, and for steamers beyond the Alaskan borders.

Climate

The climate of Alaska varies from temperate in the "Panhandle" region of the south to Arctic conditions north of the Circle. The Pacific coast of Alaska, however, is not as cold as Labrador and other eastern areas in the same latitudes. Instead of a cold creep of water from Arctic regions, the Pacific seaboard is influenced by a drift of warm waters from lower latitudes and moving in the direction of the prevailing winds. The climate along the south coast is thus both moist and equable. The annual rainfall is heavy (from 80 to 110 inches), chiefly falling in autumn and winter, the temperature rarely falls below 0° F. or rises above 75° F., while the range of average temperatures is usually about 25° F.

Northward from the "Panhandle" region the rainfall diminishes, and the temperature falls to a certain extent, but fogs and mists become more persistent, especially among the Aleutian Islands and in the Bering Sea. Passing to higher latitudes, the climate becomes typically Arctic; the winters increase in length and severity; the rainfall diminishes. At Point Barrow the mean annual temperature falls to 7.7° F., and the precipitation is not more than about 10 inches. The climate of the Central Plateau is intermediate between the conditions on the south and north coasts. The precipitation varies locally and annually from 11 to 21 inches, snow falling heavily in winter. The range of temperature is great, especially in the upper Yukon valley, where ranges from - 75° to 90° F. have been recorded. The mean annual temperature at St. Michael is about 26° F., at Fort Clatsop about 22° F., and on the boundary, long 141° W., about 21° F. The summer days in the central region are not only warm, but clear and long, with sufficient light and warmth to thaw the snows completely, unfreeze the rivers, and admit of agriculture; but during the night sudden falls of temperature may occur.

Agriculture

Though it was commonly supposed the development of agriculture would not be possible in such high latitudes, yet successful experiments in cereal-growing have been

carried out in Alaska. Experiments have been made in Copper Center, Kenai, Kodiak, Rampart, and Fairbanks, with the result that it has been found that hardy vegetables can be grown south of the Arctic Circle, except on the west coast. Potatoes, cauliflower, cabbage, peas, lettuce, and radishes have been produced at the stations. Grain-growing is possible in various areas as far as the Arctic Circle, where the summers are sufficiently long to mature rye, oats, and barley. Oats, rye, and barley are regularly produced round Fort Yukon. It is proposed to develop the Copper River district as even a wheat-growing area.

The rich growth of grass in the summer, and the absence of storms in winter, make cattle-ranching possible in many places, while sheep have already been landed for the pastures in the equable region of the Aleutian Islands, and reindeer introduced from Siberia for the northern pasture areas.

The timber resources of Alaska, though accessible, have not been fully developed. Dense forests of spruce, hemlock, and cedar occur on the wet coast ranges, and open forests in the drier interior. The chief value of the wood is for pulp, and a number of saw-mills are working. The national forests of Alaska cover an area of about 20,884,124 acres.

Fisheries

The fisheries of Alaska are important, and include valuable cod, halibut, and herring fishing-grounds along the southern coast, whaling, and salmon fisheries in many of the coast rivers. The Karluk and Mushagak streams are the most famous salmon rivers; the total annual catch has been estimated at 40,300,000 dollars. The seal fisheries have decreased in value, but are still important in the Aleutian Islands, but especially in the well-known Pribilof group farther west. In 1917 the number of seals in the herd was 4,408,700.

Minerals

The mineral wealth of Alaska is considerable, and by no means fully exploited. It includes gold, silver, copper, coal, and oil.

Gold was discovered in the Stikine River as early as 1861. It remains important in the south-east, where the fields are most accessible, but deposits occur throughout Alaska. Juneau is situated on tide water, and has one of the largest quartz-mines in the world. Deposits are also found near Valdez, near Fairbanks in the Tanana district, and near Nome on the west coast, where gold is washed in the streams. The total output of gold in 1917 was 709,049 ounces, valued at about 14½ million dollars.

The coal deposits—considered to be even more valuable than the gold, and estimated as at least 150,000 million tons—are extensive, of every grade, and in many instances accessible. Lignite has been found near Fairbanks. The best anthracite to be found on the Pacific is mined on the Bering and Matanuska River coal-fields. The Matanuska field is the larger, but up to the present the Bering River field is the more accessible, being linked by rail with tide water. The Matanuska district is being linked with Seward, 180 miles away.

Copper is known to be abundant near Mount Wrangell, but not exploited owing to the difficult nature of the country. One of the first and easiest mines is in Prince William Sound. The output of copper in 1917 was valued at about 24¼ million dollars. In Prince of Wales Island tin ore deposits occur, and marble quarries are being developed. Gypsum has been found on Chicagof Island. Oil has been struck in the Kayah district. Lead and silver are also found.

MINERALS, 1917

Mineral	Output	Value
Gold ...	709,049 oz.	14,657,353 dollars
Silver ...	1,239,150 oz.	1,021,060 "
Copper ...	88,793,400 lb.	24,240,598 "

Commerce

The seal and salmon fisheries and mining form the most important industries of Alaska at the present time, though fur-trading, saw-milling, and canning may also be included, but a full development of the natural resources of the country is still a problem of the future. The great obstacle is the difficulty of transport. In the interior the Yukon River forms a magnificent natural route east and west, navigable in summer, with good landings, and making a good trail during the winter snows; but it forms

a devious route from the interior to Pacific coasts. The coastal ranges running parallel with the shore-line make the problem of direct access extraordinarily difficult, but it is essential that railways shall be constructed to tap the resources of the hinterland. The main rail routes constructed or partially constructed run inland from Seward, Cordova, and Seward.

Government

Alaska was acquired from Russia by treaty in 1867. It was administered in various ways until August 24, 1912, when Alaska was made a Territory of the United States, with its own legislative assembly, composed of eight senators and sixteen representatives. But as the Congress at Washington reserves certain rights, and the President of the United States appoints the Governor for four years, the Territory is in reality administered conjointly by Congress and the Local Assembly. The Governor is assisted by a Secretary, a Surveyor general, and also other officials.

Religion and Education

The following denominations have missions in Alaska: Russian Orthodox, Roman Catholic, Episcopalian, Presbyterian, Methodist, Baptist, Congregational.

There were sixty-four schools in Alaska in 1918.

CANADA

Area

The area of Canada has been variously estimated, but may be stated as approximately 3¼ million sq. miles. It is thus larger than the United States, nearly as large as Europe, and contains in Canada proper alone about a quarter of the total land area of the British Empire. The mainland stretches from about lat 42° to 70° N., and from about long. 56° to 141° W.

Boundaries

Canada is bounded by ocean on three sides—the Pacific on the west, the Atlantic on the east, the Arctic on the north. Both the Atlantic and Pacific coasts give an extent of several thousand miles for fisheries and shipping. The Pacific, though the smaller, is in several ways more useful. Owing to the warmth of the North Pacific drift, and to the Bering Strait being both too narrow and too shallow to admit of much ice into the Pacific, the west coast of Canada is open throughout the year. On the Atlantic coast, however, owing to the coldness of the Labrador current, and the mass of land round the St. Lawrence, shipping can only be carried on for about eight months. For four months not only the river itself but the whole gulf is closed by ice. Moreover, two of the three openings into the Atlantic—Belle Isle Strait and the Gut of Canso—are narrow; and there are frequent fogs in summer, rendering shipping dangerous in spite of a good depth of water. On both coasts there are

excellent harbours. In the west the most important is Vancouver; in the east are the open harbours of Halifax and St. John. Off the north coast, extending the Canadian area far to northward, is the North American Archipelago, while the Hudson Bay, 1000 miles long by 600 wide, penetrates far into the interior, and exerts marked effect on the climate.

On the south Canada is separated from the mass of the United States partly by the Great Lakes and partly by an arbitrary boundary along the parallel of latitude 49° N. East of the St. Lawrence the boundary is very irregular, running north along the Green Mountains and south along the St. John River.

Population

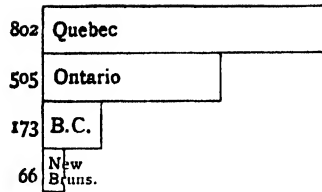
The population according to the census of 1911 was 7,206,000, but the estimated population for 1917 was returned as over 8,000,000. The Eastern Provinces are the most thickly populated, four and a half millions of the total being concentrated in the provinces of Quebec and Ontario. The Northern Territories form the most sparsely populated areas. The population per square mile is lowest in the Northern Territories (0.04 per sq. mile), and highest in the Eastern Provinces, the maximum being 42.91 to the sq. mile in the small Prince Edward Island. The population is increasing, especially in the Prairie Provinces. The number of immigrant arrivals in Canada in 1919 was 57,702, as compared with the maximum of 402,432 in 1913, and 384,878 in 1914.

For 1919 about 17 per cent were from the United Kingdom, 70 per cent from the United States, 13 per cent from other countries.

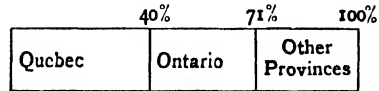
Montreal is the largest city, with a population of over 470,000; Toronto, Winnipeg, and Vancouver are the only other cities with populations over 100,000.

POPULATION BY PROVINCES, 1911

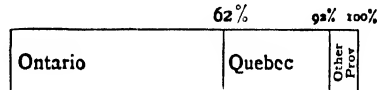
Province	Population (1911).	Later Statistics (1916)
Acadian Provinces		
Prince Edward Island	93,728	—
Nova Scotia	492,338	—
New Brunswick	351,889	—
Laurentian Provinces		
Quebec	2,603,112	—
Ontario	2,523,274	—
Prairie Provinces		
Manitoba	455,614	553,800
Saskatchewan	492,412	647,811
Alberta	374,603	496,525
Mountain Province and Northern Territories		
British Columbia	392,400	—
Yukon Territory	8,512	—
North-west Territories	18,481	—
Total	7,206,643	



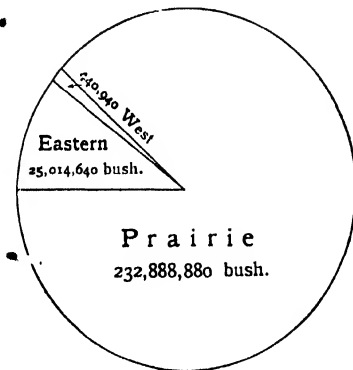
Manufacture of Pulp by Provinces in 1918, in thousands of tons



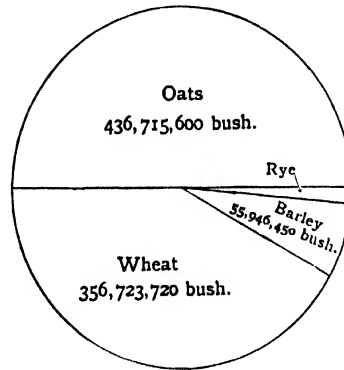
Relative Production of Butter in Quebec, Ontario, and other Provinces (1918)



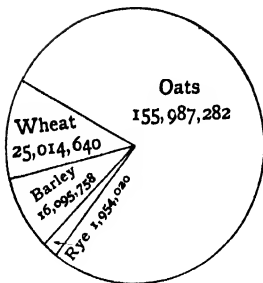
Relative Production of Cheese in Ontario, Quebec, and other Provinces (1918)



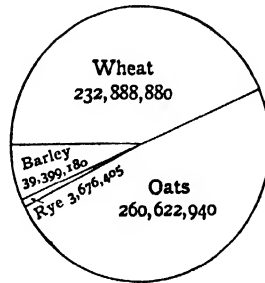
Relative Proportion of Wheat in the Western, Prairie, and Eastern Provinces of Canada, 1915-19



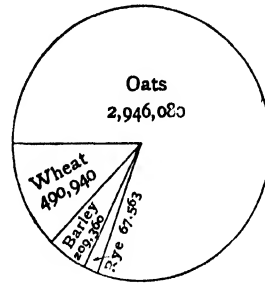
Relative Proportions of Canadian Grain Crops, 1915-19



Relative Proportion of the Grain Crops in the Eastern Provinces, 1915-19, in bushels



Relative Proportion of Grain Crops in the Prairie Provinces, 1915-19, in bushels



Relative Proportion of Grain Crops in the Western Provinces, 1915-19, in bushels

Relief

The interior relief of Canada falls naturally into three divisions: (a) a high mountain system in the west, (b) a highland area in the east, and (c) a vast plain in the centre.

The mountain system of the west is high, broad, and near to the sea. It runs about 1500 miles from north-west to south-east, and being close to the ocean, and running at right angles to the prevailing west winds, receives a heavy rainfall, and functions as a magnificent watershed, which supplies the entire area to the east with the most complete system of inland navigation in the world. The three great rivers draining eastward are the Mackenzie, the Saskatchewan, and the St. Lawrence. On the western flank shorter rivers flow to the Pacific, the most important being the Fraser and Skeena. The greatest heights are attained in Mount Brown (16,000 ft.) and Mount Hooker (15,690 ft.), both in the famous Rocky Mountains. Parallel to the Rocky Mountains, and along the coast, run the lower Coast or Cascade Range. Though the system is high, there are many passes used by road and railway.

The central plain forms an enormous tract of young fertile rock at a low elevation, separating the mountains of the west from the highland block of the east. It is part of the continuous plain of North America, which stretches from the Arctic regions to the Gulf of Mexico. It consists in Canada of rolling grasslands in the lower latitudes, merging into a forested area farther north, but passing into barren tundra in the highest latitudes. The plain is well watered by navigable rivers draining through numerous lakes to the sea. The eastern highland is divided into two by the St. Lawrence. The northern section rises to 8000 feet in the mountains of Labrador, but the mass of the area forms a plateau region, and a low watershed between the Hudson Bay and Atlantic drainage. South of the St. Lawrence the mountains run north-east and south west, forming the most northerly extension of the Apalachian system of the United States.

Climate

The north of Canada is within Arctic regions, and has Arctic climate and vegetation.¹ Temperate Canada may, however, be divided into three climatic belts corresponding to the three main physical divisions. The western belt, owing to the configuration of the land, nearness to the ocean, and influence of the warm Pacific current, is characterized by a mild but wet climate. In the central area the rainfall diminishes with distance from the ocean, but is nowhere deficient owing to the large expanses of inland waters. The area is, however, subject to continental extremes of temperature. This is further accentuated owing to the absence of any physical barrier to north or south, thus admitting to the southward the cold winds from the north, and also warm winds far northward from the Gulf of Mexico.

In the eastern belt the precipitation is again heavy (chiefly in snow in winter), and though the range of temperature is modified by nearness to the Atlantic, the

average temperature is lower than in the west, owing chiefly to the presence of the cold Labrador current.

NOVA SCOTIA

Nova Scotia is the most easterly province of the Dominion of Canada, and consists of the peninsula of Nova Scotia and the island of Cape Breton, which is separated from the mainland by the Gulf of Canso. The area of the province is 21,428 sq. miles, with a population in 1911 of 492,338. Cape Breton is nearly divided into two by the Bras d'Or, which is nearly 55 miles long, and as much as 20 miles broad in places, and forms a lovely lake-like expanse of sea.

The coast of the peninsula is bold and rocky, but has some splendid harbours. Halifax—practically the best of them—which is in the latitude of Bordeaux, is, both for size and safety, one of the finest harbours in the world. Its waters are very deep, the anchorage is good, the entrance is protected by McNab Island, and the Bedford Basin provides 20 sq. miles of shelter. It is practically the only really good Atlantic port in the Dominion which is open all the year round, and is connected by rail with all parts of Canada.

The surface of Nova Scotia is undulating, with low hills in the north and the south. One fifth of the province consists of lakes and streams, most of the latter flowing from an important watershed which extends lengthways through the middle of the province.

The Atlantic side of the watershed is not very fertile, but the soil on the western flank is softer and much better.

The climate of Nova Scotia is sometimes raw and foggy, owing to the meeting of the cold Labrador current with the warm Gulf Stream off its eastern coast; but it has no extremes, and the fogs only affect the eastern half of the peninsula. Elsewhere the protection of the hills, the proximity of the Gulf Stream, and the fact that no place is more than 30 miles from the sea, causes the climate to be even and healthy.

Resources and Industries

In the lowland areas, especially around Minas and Annapolis Basins, agriculture is important. The total

Acreage	
Oats	158.8
Potatoes	62
Turnips	20
Spring-wheat	28.9
Barley	13.8

Production of Crops in Nova Scotia in 1919, in thousands of acres

area under crops in 1917 was 754,326 acres, producing hay, clover, wheat, barley, and potatoes. Hay and

¹ Note, see p. 243

clover form the principal crops with an acreage in 1919 of 678,357 acres, and yielding 1,425,000 tons, while the potatoes are the best grown in Canada. Fruit-growing is also prosperous, apples being grown in large quantities, and exported chiefly from Windsor. The average production of apples is about 1,000,000 barrels. Cherry-growing takes the place of apples near Digby. The equable moist climate, good pastures, and ease with which hay, clover, and other fodder plants can be grown have favoured the development of dairying, and the keeping of other live stock. The value of the dairy

Yield	
Turnips	16.2
Potatoes	9.9
Oats	5.7
Wheat & Barley	9

Production of Crops, other than Hay and Clover, in Nova Scotia in 1919, in millions of bushels

products amounted to more than \$1½ million dollars in 1918 from 407,000 cattle, while the annual clip of wool is over one million pounds. The production of creamery butter (1918) amounted to 1,750,005 lb., of cheese to 61,195 lb.

In the interior of the province there are still extensive forests, chiefly of pine, fir, spruce, birch, hemlock, oak, and maple. The forested area is estimated as covering nearly 8000 sq. miles, while the value of the products in 1917 amounted to four and a half million dollars. Some timber is used for shipbuilding, but thousands of "cords" are exported to the United States.

Cattle	405
Sheep	261
Pigs	69.5
Horses	69.5

Live Stock in Nova Scotia, 1919, in thousands

One of the chief sources of wealth in Nova Scotia is the coal, which is of an excellent quality of the bituminous kind. The coal discovered covers 725 sq. miles. The most productive field is near Sydney, in Cape Breton Island, and its situation at the narrow mouth of the Bras d'Or, and close to Louisbourg, the harbour nearest to Europe, gives it special advantages. The other great coal-field is along the north coast of the peninsula, where good coking coal is found in seams 30 feet thick, side by side with pure limestone and the finest iron-ore. Some of the mines are at Pictou, close to the sea; others are at Springhill, near the foot of the Cobequid Mountains and close to the Intercolonial Railway. The iron, which is said to be equal to the finest Swedish ore, is worked at

New Glasgow, Truro, and Londonderry. The coal raised in 1918 amounted to 5,265,464 long tons, but shows a decrease on the two previous years. About 1,000,000 tons of pig iron and steel ingots were produced in the same year. The gold-fields are said to cover 3000 sq. miles. The most important deposits worked are the Salmon River and Shubenubee Mines. This district is also thickly covered with gypsum, which is found in the hard or soft state all over the east and north of the province and round Minas Basin in beds from 2 to 200 ft. thick. It is exported chiefly from Windsor. Other minerals include copper, lead, silver, manganese, tungsten, silver, and fireclays, &c.

One of the most valuable of all the Nova Scotian industries is fishing. The neighbouring waters teem with fish, especially cod, herring, haddock, mackerel, and lobster. The value of the catch amounted to over 15,000,000 dollars in 1918, i.e. one-fourth of the total for Canada.

Government

The Federal Government of Canada appoints a *Lieutenant-Governor*, who holds office for 5 years. The Crown appoints a *Legislative Council*, consisting of 21 members, appointed for life. A *House of Assembly*, consisting of 43 members, is elected every five years by popular vote. The franchise is universal upon certain conditions. The Legislature administers all provincial affairs. Local government is administered in (a) counties and (b) towns by county or municipal councils respectively, consisting of councillors elected every three years by the ratepayers.

Education

Education is free and compulsory. There are elementary and high schools, academies, an Agricultural College, and special schools in connection with the mining and industrial centres.

Religion

Numerous denominations and sects are represented in Nova Scotia, but Roman Catholics and Presbyterians predominate, with over 100,000 adherents, while Baptists, Anglicans, and Methodists number between 50,000 and 100,000.

NEW BRUNSWICK

New Brunswick, with an area of 27,985 sq. miles (i.e. rather smaller than Scotland), has two sea-coasts. The one, along the Gulf of St. Lawrence, is low and fringed with marshes; the other, on the Bay of Fundy, is bold and rocky. The tide in this bay rises faster and higher than at any other place in the world. St. John, the commercial capital of the province, is the best harbour, and is open all the year round. Chatham is next in importance, but is closed by ice during the winter; but the estuary of the Miramichi, on which both Chatham and Newcastle stand, makes the finest harbour in the whole of the Gulf of St. Lawrence.

The surface of the country is generally undulating,

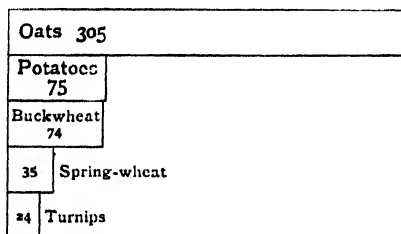
with large areas of flat alluvial soil along the river valleys; but towards the Quebec border there are some hills (Shickshock Mountains, &c.), and in a few places isolated mountain peaks break the monotony of the view. The St. John is the biggest river, and is more or less navigable up to the Grand Falls, 225 miles inland; but large steamers cannot go above Fredericton.

The want of protection, and the large amount of land around, make the *climate* one of extremes. From December to April the ground is covered with snow, and the thermometer falls to -30° F., the severe frost doing the ground as much good as several ploughings would do. In summer as much as 95° F. is registered, and the great heat, acting on the wide extent of surface water, often causes dense fogs.

Resources and Industries

The resources of New Brunswick include agriculture, forestry, and deposits of valuable minerals, and based on these resources are well-developed associated industries.

New Brunswick, like Nova Scotia, possesses valuable dyked lands at the head of the Bay of Fundy, the soil on

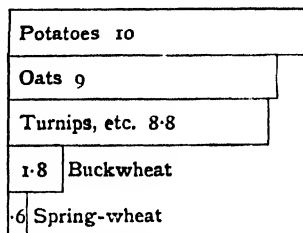


Average of Crops, other than Hay and Clover, in New Brunswick, 1919, in thousands of acres

which is a tenacious loam, very rich in phosphates, lime, and salt. It is therefore admirably adapted for hay and cereals, and it needs no manure except an occasional letting in of the sea; but the grass requires ploughing up about once every ten years. Another fertile belt stretches up the St. John River, and the soil along the Tobique tributary is particularly good. There are three kinds of natural grasses, which grow respectively on very dry, medium dry, and wet land. The first makes the best food for horses, the second fattens cattle, and the third produces most milk. In 1919, over 780,000 acres were devoted to hay and clover, yielding over 1,000,000 tons. Most of the hay is grown in the triangular area enclosed by Moncton, Fredericton, and St. John, and is from Timothy grass. The land is largely given up to potatoes northward and oats westward. New Brunswick has also a considerable sheep and cattle trade, the cattle numbering over 365,000 and sheep over 212,000 in 1919. Most of the sheep for export to Europe are fed on the rough land east of St. John, and the cattle for the same purpose on the dyked lands along Shepody Bay, and both are exported via Halifax. In 1918 the production of creamery butter amounted to 633,316 lb., and of factory cheese to 1,149,367 lb.

Lumbering is very important in New Brunswick. Practically every acre of its province, except the dyked lands, was covered with timber; and at the present day the Government owns over 10,000 sq. miles of forests. Most of the trees are black spruce, which grow to an average height of 60 feet, and have an average thickness of 2 feet. The wood is light and strong, and furnishes most of the deals for export.

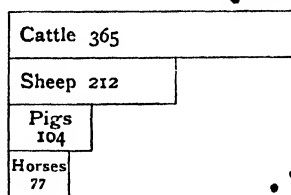
Hemlock spruce, though not so common as the black, is valuable because its bark is useful for tanning purposes. The existence of extensive hemlock forests north of



Yield of Crops, other than Hay and Clover, in New Brunswick, 1919, in millions of bushels

Fredericton has largely helped to make that town so important as a leather market. Other woods include pine, cedar, maple, birch, and larch. The maple requires good soil, and is in demand among cabinet-makers; it also gives a large amount of sugar, and is therefore superior to all other woods for fuel.

In 1918 the production of lumber was about 440,000 feet board measure. Over 11,000 cords of wood were used locally in the manufacture of pulp, of which 66,619 tons were produced. The centre of the saw milling is at St. John, partly on account of the excellent harbour and partly owing to the proximity of coal. The transport of



Live Stock in New Brunswick in 1919

the timber is conducted during the winter, when the logs are taken to the stream-banks, and floated by the spring floods.

The fisheries are among the most valuable industries. The Bay of Fundy supplies cod, haddock, herring, mackerel, and shad, chiefly for the home market; the export trade—principally in salmon, lobster, and cod—is supplied from the Gulf shore. There the most profitable salmon-ground is the Bay of Chaleur, and salmon hatcheries are kept on the Restigouche River. There is also a large salmon fishery on the St. John River. The total value of the fisheries was valued at over $5\frac{1}{2}$ million dollars.

The mineral resources include deposits of coal, iron, gypsum, copper, manganese; but so far only the coal and gypsum have been mined to any extent. The coal is found at Great Lake, about half-way between Fredericton and Moncton; the only iron is at Woodstock; but the gypsum deposits are of great importance, and found in large quantities. In 1918 the Hillsboro quarries produced 27,425 tons, which was exported to the United States and to other parts of Canada.

Government

The government of New Brunswick is administered by the Lieutenant-Governor and a Legislative Assembly, consisting of 48 members elected for five years.

Education

Education is free. In 1800 a university was founded at Fredericton; it has 200 students.

PRINCE EDWARD ISLAND

Prince Edward Island is the smallest of all the Canadian provinces, its area being only 2184 sq. miles, the size of the county of Norfolk. The coast is so deeply indented with bays that no place is more than 8 miles from the sea; and in two places the north and south coast-lines come so near together that the island is divided into three counties, separated from each other by two narrow isthmuses. Charlottetown, in the middle of the south coast, is on a large, deep, and well-sheltered harbour. The soil is a very fertile sandy loam, resting upon a stiff clay and sandstone, and the level of the country never rises to more than 500 ft. above the sea.

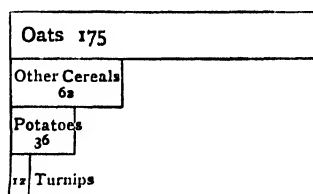
The climate is one of extremes; but there is always a cool sea breeze in summer, and the much higher islands of Newfoundland and Cape Breton keep off the fogs which trouble Nova Scotia. The total precipitation during the year at Charlottetown is between 50 and 60 in., most of it falling in September and October. In winter Northumberland Strait is frozen over for three or four months, but constant communication is kept up with New Brunswick and Nova Scotia by means of ice boats. The population in 1911 was 93,728, and Prince Edward Island has the highest percentage (42.91) to the square mile of the Canadian provinces, but the population does not show an increase.

Resources and Industries

The whole island, except a few bogs, is under cultivation; and even the bogs have their use, for they supply peat to the villages. These villages, or groups of farms, are joined to one another by a railway that runs through the whole island from Tignish to Georgetown and Souris.

The chief crops are oats, potatoes, turnips, and hay; and the island is famed for its horses and sheep. About 488,000 acres are under field crops, 316,000 acres are

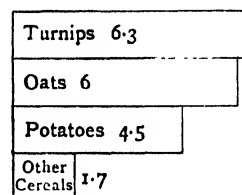
forest, and 285,000 are in pasture. In 1919, 237,883 acres were under hay and clover, yielding 428,000 tons. Live stock are kept, sheep and cattle being most numerous. The production in 1918 of creamery butter amounted



Acreage of Crops, other than Hay and Clover, in Prince Edward Island, 1919, in thousands of acres

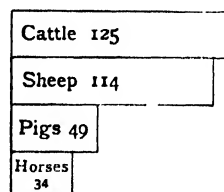
to 548,924 lb., of cheese to 1,535,871 lb. Silver-fox ranching is making progress in the province. In 1918 there were over 300 ranches.

The fisheries were much neglected in the past, but are



Yield of Crops, other than Hay and Clover, in Prince Edward Island in 1919, in millions of bushels

now being developed. The chief fish in the neighboring waters are mackerel, lobster, herring, cod, and oysters. The lobster and oyster fisheries are the most important — lobsters especially near Charlottetown and oysters near



Live Stock in Prince Edward Island, 1919, in thousands

Richmond Bay. The Dominion Government have acquired control of the oyster areas, and propose to develop the industry. In 1918 the value of the fisheries was estimated at 1,148,200 dollars.

Government

The province is administered by a Lieutenant-Governor and an Assembly composed of 30 members, elected for four years. Electors must have certain qualifications.

Religion

As in Nova Scotia, Roman Catholics and Presbyterians predominate, but many other different denominations are represented.

Education

In 1918 there were 473 schools and 2 colleges.

QUEBEC

The province of Quebec covers an area of 766 834 sq. miles, of which 15,969 is water, and has a population of about 2,380,000 (1917), or about six to the square mile. Originally a French colony, the mass of the population is still of French origin. Though nominally an inland province, still, with the gulf and river frontage, it has a coast-line of some 2600 miles, 800 of which are on the open waters of the gulf. The rapids along the Ottawa and the St. Lawrence have been circumvented by ship canals; and the St. Lawrence has been dredged to allow vessels drawing 30 ft. of water to reach Montreal, which is 1000 miles from the Atlantic.

The surface of the province is uneven; and much of the northern half of it is incapable of cultivation, owing partly to the poorness of the soil and partly to the severity of the climate. The rest of the province may be divided into three distinct regions: Notre Dame, the St. Lawrence, and the Laurentian.

The Laurentian mountains stretch from west to east along the north of the province at an average height of 1600 feet, and are composed mainly of hard rocks, which "weather" very slowly; but they are intersected by numerous bands of limestone, which have "weathered" into fertile valleys. In these valleys Ottawa, St. Maurice, and Saguenay are found the finest trees of the great forests which cover the whole of the north of the province from the Ottawa River to Lake St. John, and from which the province derives its chief source of revenue.

The Notre Dame system is entirely south of the St. Lawrence, and as it rises in places to a height of nearly 4000 feet (Shickshock Mountains), it acts to some extent as a natural boundary between the province and the States of Maine and Vermont. The rocks are of softer character, and "weather" into a slightly sandy yellow loam, admirably adapted for cereals or pasture. Between the highland masses which run south-west to north-east, parallel to the gulf, are wide river valleys, giving easy communication from the gulf to the Acadian provinces. No less than three lines utilize the "gaps", and link Quebec with ice-free coasts. The 400 miles of land between the Chaudière River and the Gaspé Peninsula are almost entirely devoted to grazing—cattle on the lower slopes, sheep on the higher slopes.

The St. Lawrence valley is covered with strong and compact clays, generally upon sandstone or limestone, stretching more or less from Lake St. John to Richmond. Such a soil would produce crops of several kinds in abundance, but it is specially adapted for grain.

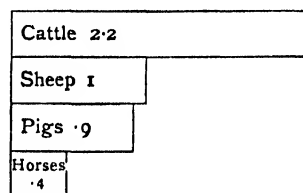
Climate

The climate of Quebec is colder than lands in the same latitude in Europe, but is typical of the eastern provinces of the Dominion.¹

	Lat	Average Mean Temperature.			Precipitation.
		Summer	Winter	Year.	
Anticosti	49° 54'	55° F.	14° F.	35° F.	35.80"
Chicoutimi	48° 15'	61° F.	6° F.	38° F.	29.38"
Quebec	46° 46'	64° F.	12° F.	38° F.	47.98"
Montreal	45° 30'	66° F.	15° F.	42° F.	39.24"

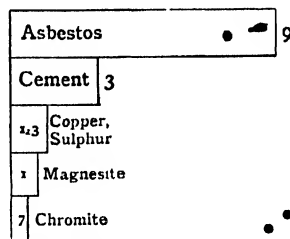
Resources and Industries

In the fertile areas Quebec has rather more than five and a half million acres under field crops. Oats are by



Live Stock in Province of Quebec, 1919, in millions

far the most valuable grain, with an acreage in 1919 of 2,141,107 acres, yielding 57,275,000 bushels. Bailey and wheat rank second in point of yield, five and four million bushels respectively. From approximately the same acreage (250,000 acres) over four million bushels of mixed grains were raised in 1919. Hay and clover form,



Production of Chief Minerals in Quebec, 1918, in millions of dollars

however, the most productive crop, with an acreage of 4,299,000, yielding 6,440,000 tons in 1919. Potatoes and turnips are also grown, the total yield of the former amounting to 57,280,000 bushels, of the latter to 27,780,000 bushels (1919). Richmond, in the fertile St. Lawrence valley, is excellently supplied with railway accommodation for the transport of agricultural produce. On the extensive grazing-lands, especially on the southern flank, cattle and sheep are kept in large numbers. In 1919 the number of cattle were 2,269,644, of sheep, 1,007,425, of pigs, 935,425, of horses, 463,902. Poultry

¹ See note on Climate under Canada.

was estimated to number 3,808,970 of hens, ducks, geese, &c., but this shows a decrease as compared with the estimates for 1918. The making of cheese and butter is a valuable industry. In 1918, 30,839,505 lb. of butter were produced, being the maximum production for the Dominion, while 39,117,406 lb. of cheese were made, Quebec ranking second to Ontario.

The forests of Quebec have been estimated as covering 130,000,000 acres with large reserves. Lumbering is carried on, while large saw mills are situated along the rivers. The most valuable trees are the red and white pine in the Ottawa district; the prevailing species elsewhere are spruce, cedar, beech, and maple—an immense trade in these is carried on along the Saguenay River. Quebec produces about half of the total pulp manufactured in Canada. In 1918 just over 1,000,000 cords of wood were used, producing 802,030 tons of pulp.

Besides being invaluable for the lumber trade, the rivers of the province are full of fish; but most of the fishing is carried on off the Magdalen Islands, and at other places in the estuary or on the Gulf of the St. Lawrence—these deep sea fisheries supplying the export trade in cod, herring, and mackerel. The cod fisheries are the most valuable. Below the confluence of the Saguenay and the St. Lawrence, shoals of fish lie waiting for the millions of their smaller brethren that come down the rivers. The Saguenay itself, which is navigable for ocean vessels for 70 miles, literally swarms with fish.

The mineral wealth of Quebec, valued at 18,707,762 dollars (1918), is confined to copper, asbestos, apatite, and iron. The copper is found near Sherbrooke and Harvey Hill, the asbestos, the most valuable deposits—at Thetford, Black Lake, especially; the apatite along the Gatineau River, especially round Hull, where there is also a mine of magnetic oxide iron. Iron deposits are the characteristic metal of the Laurentides, as copper is of the Notre Dame.

Limonite, or bog iron, is also found in large quantities, the richest deposits being near Three Rivers, from which town it is exported in the form of pig iron. Coal has to be imported, however, as wood and peat are the only forms of fuel. There is a ready market in Montreal, which possesses large iron and steel industries.

Montreal, with a population of 600,000 (1917), is the largest city in Canada; it is the centre both of the waterways and of the railways. The Canadian Pacific Railway starts at Quebec, but is joined by the Grand Trunk at Montreal. The Grand Trunk has two important branches, one south east to Portland, New York, and Boston, and the other south-west to Chicago.

Montreal has also direct communication with Albany and New York by water, and is nearly 300 miles nearer to Liverpool than New York is. Montreal also has the unique advantage of being an ocean port, though it is 1000 miles from the Atlantic, standing at the head of ocean navigation in summer, with a complete system of river, canal, and railway connection with the interior.

ONTARIO

Ontario is the most important of all the provinces, and contains Ottawa, the political capital of Canada, and

Toronto, the chief university city. Its importance is due to several causes. One is its comparatively low latitude (mainly between 42° and 55° N.), which gives it a shorter winter than that of the other central and eastern provinces; another is that it has had a very uneventful history; a third, its position between Hudson Bay and the Great Lakes, which affects both its climate and its commerce; a fourth is its proximity to the richest and most populous States of the Union. Ontario stretches about 1000 miles from east to west and 1075 miles from north to south, covering a total area of 407,260 sq. miles, of which 41,380 sq. miles are water. It is thus more than three times the size of the United Kingdom, but the population only amounts to about 2,500,000, all concentrated in the southern belt of the division. Toronto is the largest city (400,000) and the provincial capital. Ottawa and Hamilton have about 100,000 inhabitants.

The average elevation of the province is low, as it consists essentially of a section of the old Archaean nucleus of the continent, with the high ground (under 2000 ft.) in the south, flanking the Great Lakes, and a very gradual and long slope northwards to the Hudson Bay.

In the west of the high ground numerous lakes occur, the largest being Lake Nipigon (20 by 50 miles), while on the east a break in the hills between the Ottawa River and Georgian Bay admits the Canadian Pacific Railway to the west of Lake Nipissing. The low elevation and even surface have been most favourable to locomotion, while the natural resources have been great, and supplied the incentive to develop the rail and water systems of the province. Though inland, Ontario has 3000 miles of water frontage. Of this 400 miles are along the Ottawa River (which forms the eastern boundary), 250 miles being navigable for steamers. Through navigation from Lake Superior to the ocean is facilitated by the construction of canals linking the lakes and avoiding the falls and rapids, which are locally useful as sources of water power. The most famous canals are the Sault Sainte Marie and Welland. In 1918 the total tonnage through the Sault Sainte Marie amounted to 12,913,711 tons.

Climate

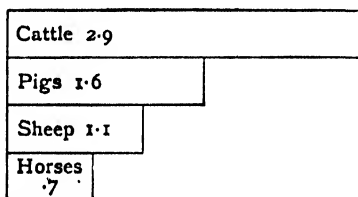
The climate of Ontario varies with the latitude, but is everywhere modified by the presence of the large water masses. The western section tends to be more "continental", with greater extremes of temperature—cold bright winter, warm summers, and less rainfall than the eastern section. The peninsula area is noted for the mildness of its winters, while the summers, though warm, are not as warm as in the west, and the precipitation is higher. The following figures illustrate the typical differences:—

Town.	Approximate Average Temperatures		Annual Precipitation.
	Winter	Summer	
Toronto	23° F.	65° F.	34"
Ottawa	13° F.	67° F.	33"
Port Arthur ...	7° F.	69° F.	23"

Resources and Industries

The chief resources of Ontario are agricultural and mineral, but also include extensive forests and valuable fisheries.

Though over 13½ million acres are under cultivation at the present day, there remain vast tracts of good alluvial soil which are still untouched. Wheat and barley are the staple cereals. In 1919 there were 980,644 acres under wheat, yielding 20,698,500 bushels (three-quarters was fall wheat), and 567,183 acres under barley, yielding 13,134,000 bushels. Other crops included oats, rye, buckwheat, mixed grains, potatoes, turnips, hay, and clover. In 1919 the province produced 15,140,000 bushels of potatoes, 42,500,000 bushels of turnips, man-golds, &c., and 5,589,000 tons of hay and clover. The development of dairying has corresponded with the increase of the acreage under grass and other food crops for cattle. There are more head of cattle in Ontario than any other province, though Quebec is a close second. In 1919 the live stock was estimated at 2,927,191 cattle, 1,695,487 pigs, 1,101,740 sheep, 719,569 horses, and 11,705,809 poultry—the last a maximum for Canada.



Live Stock in Province of Ontario, 1919, in millions

The making of cheese and butter forms one of the chief industries in Ontario. Nearly 92 per cent of the total manufacture of Canadian cheese is from Quebec and Ontario, but Ontario produces nearly twice as much cheese as Quebec. Nearly 71 per cent of the total production of butter in Canada is from Quebec and Ontario, but in this Quebec leads.

The excellence of the soil and the good climate in the peninsula area of the south-east have led to the special development of agriculture and dairy farming, but it is also the land of fruit. Every farm has an orchard, and apples and peaches are grown in large quantities. The trees are planted in alternate rows, because the peach trees come to maturity and have done bearing before the apple trees begin to spread out. When these begin to require more room, the peach trees are cut down. The ground between the rows is planted with grain, chiefly oats, as long as the trees are young; so there is no waste of any kind. Hamilton is the chief town of this district, and has a unique position. It stands on an alluvial plain lying between the present shore of Lake Ontario and an escarpment, which forms the outer rim. The rock is friable shale, the weathering of which supplies the fine soil for the fruit-growing lands below. Besides the ordinary fruits, large and small—especially apples, peaches, and strawberries—grapes and melons are very remunerative. In the extreme south-west of the peninsula is the

only district in Canada where Indian corn ripens perfectly. The centre of the whole agricultural industry is Toronto, and the density of population makes poultry-rearing and market gardening an additional source of wealth to the farmers of the peninsula. Peterborough commands a good share of the trade of central Ontario, while Port Arthur commands the Manitoba trade.

Where the ground is not under cultivation, much is covered with forests. These vary considerably in value. North of Lake Superior they are chiefly composed of spruce, balsam fir, and white birch; and therefore are of comparatively little commercial value. Between Georgian Bay and Ottawa they are composed of red and white pine, and are very valuable. In 1918 the cut of lumber in Ontario was the most valuable in Canada, amounting to 34,168,754 dollars—though British Columbia led in actual quantity produced. Over 784,000 cords of wood were used (1918), and 505,366 tons of pulp produced. The city of Ottawa, which is about 90 miles up the river of the same name, and is joined by canal to Montreal, is the centre of the lumber trade. Close to the city are the magnificent Chaudière Falls, which drive an interminable series of saw mills. Another centre is Edmonton. The manufacture of lumber is carried on at Deseronto.

Though the agricultural wealth of Ontario is so great, the mineral wealth is almost greater. The total value of the mineral production of the province in 1908 amounted to 80,308,972 dollars, showing an increase on the previous year. There is abundance of iron, round Kingston and north of Lake Superior, while in the north-west of Lake Superior are the famous silver and copper districts, Cobalt and Porcupine being especially famous. Copper is also found in the Algoma area along Lake Huron, where there is a considerable dip in the country. This dip laid bare at Sndbury, on the Canadian Pacific Railway, just west of Lake Nipissing and in the centre of the chief gold district, one of the richest deposits of nickel that the world has ever seen. To the north are valuable platinum, silver, and iron deposits. On the east shore of Lake Huron, round Godenich, there are important salt-works which belong to the same salt-bearing basin as the famous Michigan works round Saginaw Bay.

There are a number of petroleum wells (round Petrolia) and abundance of natural gas, within a radius of 10 miles from Niagara Falls, for water-power, but the one want is coal. This deficit is, however, easily made up from the Pennsylvanian coal-field, which is near and very accessible. Associated industries include manufactures of cement, pig-iron, bricks, &c.

Government

Ontario is administered by a Lieutenant-Governor with a cabinet, and one chamber composed of 111 members elected for 4 years by a general franchise.

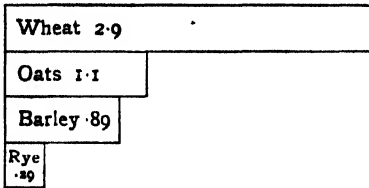
Education

The State makes large grants to the elementary and secondary schools, which are, however, also supported by local taxation. The State University is at Toronto, but there are three other universities with private foundations at Kingston, London, and Ottawa respectively.

MANITOBA

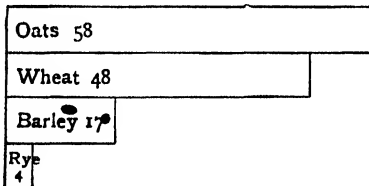
Area and Population

Manitoba, covering an area of 251,830 sq. miles—about twice as large as the United Kingdom—is situated in the very centre of the Dominion, where the eastern forests open on to the prairie. It has been the great granary of the Dominion, including part of the immense prairies of North America, which slope off towards both the north



Acreage under Cereals in Manitoba, 1919, in millions of acres

and the south from the watershed of the Mississippi and Red River. This watershed is in places 1000 ft. above the sea, but its average height is only 700 ft. Southern Manitoba is practically a dead level, some 80 ft. above the surface of Lake Winnipeg, the few ridges which do exist rarely rise to more than 60 ft. above the general level. Winnipeg city, the capital of the province, stands on one of these higher levels between the Assiniboine and Red Rivers, near the confluence of the two, about 40 miles



Yield of Cereals in Manitoba, 1919, in millions of bushels

south of Lake Winnipeg. Both rivers are navigable, and in connection with the three lakes, Winnipeg, Manitoba, Winnipegosis. The relief of North Manitoba is more rough and broken, with a general drainage slope north-east to the Hudson Bay. Low marshy areas occur north of the prairies, while north of the Saskatchewan River and Lake Winnipeg the country rises and is broken by low ridges and limestone ledges. The shores of the Hudson Bay are low and level, and generally open all the year round, though only open to navigation for three months owing to the ice-block in the northern entrance. Throughout Manitoba are numerous lakes varying considerably in size, and giving it a large proportion of water area (19,905 sq. miles) as compared with Alberta, which has approximately the same total area.

The population of Manitoba according to the census of 1911 was 455,614, concentrated chiefly in the south, where the level area, good climate, and fertile soil favoured early agricultural developments, and aid the construction of

extensive railway systems. The largest city is Winnipeg—third in point of size—with a population of about 163,000.

Climate

The climate varies according to the latitude, though continental in character throughout. The intense cold of winter, -30°F , cracks the ground through and through; and the cracks are filled with snow, which, when it melts, forms innumerable small subterranean reservoirs. Owing to this provision of nature, excellent crops of wheat have been raised from seed sown in the early spring, even though no rain fell after the sowing. The continuous sunlight also of a latitude where there are sixteen or seventeen hours of daylight at midsummer, and the dryness of the continental climate (annual fall at Winnipeg is about $21\frac{1}{2}^{\circ}$), cause the grain to ripen very perfectly. The heaviest rainfall is in July, while there is very little in spring. The prevailing wind comes from the Rocky Mountains (not from the Gulf of Mexico), and is known as the famous Chinook wind, which is warm and dry. The Chinook is really from the Pacific, but having passed through the depressions of the mountains has left its burden of rain farther west.

In the extreme north of the province about lat. 60°N . the climate becomes distinctly colder, and approximates to the conditions of the "barren lands" which begin north of Churchill.

	Lat	Winter	Summer	Precipitation
Winnipeg	50°N .	-6.8°F .	66°F .	$21.5"$

Resources and Industries

Manitoba is one of the three "Prairie Provinces", which form one of the great grain-producing and exporting areas of the world. Of the total 6,344,318 acres under crops in 1919, one-third was under wheat alone, producing rather over 48,000,000 bushels of grain. The wheat is almost entirely of the Spring variety, owing to the fact that the winters are too severe to allow the production of Fall wheat. Oats, barley, and rye are grown in large quantities, the annual yield of oats exceeding the yield of wheat, though from a smaller acreage. The railway system has been very well developed and equipped with special facilities for moving large quantities of grain for export. Elevators of different capacities are located at all possible grain centres, though Winnipeg is the great collecting point for the province. It is situated at the pivot of the grain-producing area, with through railway communication with the Atlantic and Pacific ports, United States, and the Great Lakes, as well as numerous local branch lines running in every direction.

Though the prairie area of the south is of such paramount importance, it only covers some 5 per cent of the total area of the province. To the north there still remain large tracts of fertile country completely untouched, and capable of development for the growing of cereals and root crops.

It is estimated that at least 75 per cent of the entire surface of Manitoba is covered by forests, lying along the entire central and northern parts, passing into open woods northward to the "barren lands" and the Hudson Bay.

Though extensive, the forests are not of great value and are limited to a few species—spruce, poplar, birch, and jack-pine. Of these the white spruce is the only species of value for saw-mill purposes, growing to a fair size and averaging from 18 to 24 in. in diameter. A large saw-mill has been started at The Pas, but the annual cut of lumber is comparatively small.

The network of lakes and rivers in Manitoba forms an enormous field for inland fisheries, while the conditions are favourable to the production of excellent fresh-water fish. The total fisheries (1916-7), chiefly of pickerel, pike, perch, and tullibee, amounted to over 1,000,000 dollars, the principal yields being taken from Lake Winnipeg. The northern area has been famous from early days for fur and game. The Hudson's Bay Company have several large ports and outposts—the largest being Churchill, York Factory, Norway House, Nelson House, The Pas, &c. In 1916-7, it was estimated that the fur catch for the north amounted to 1,000,000 dollars, half of this passing through The Pas, being shipped by rail.

Within the last few years valuable mineral deposits of gold and copper have been discovered. Mining operations have been begun, but the ground has not been fully surveyed as yet. The mining district extends about 125 miles east and west, midway between the Saskatchewan and Churchill Rivers. The Pas stands at the natural gateway to the northern regions, and a railway (nearly complete) is being constructed by the Canadian Government from The Pas to Port Nelson, to tap the various sources of minerals and forests.

Government

The province is administered by a Lieutenant-Governor, and a Legislative Assembly consisting of forty-nine members, elected for five years.

Education

Education is supported by Government grants and local taxation. There is one university, founded in 1877, in Winnipeg, and one Agricultural College, founded in 1906.

SASKATCHEWAN

The province of Saskatchewan, with an area of 251,700 sq. miles, is approximately the same size as Manitoba, but of this total, the water area is only 8329 sq. miles, or half the water area included in the neighbouring province. Saskatchewan stretches some 760 miles from north to south, through 11 degrees of latitude—from 49° to 60° N., and through 8 degrees of longitude—from 102° to 110° W. At its widest extent, in the south, it measures 393 miles, but northward the width gradually diminishes to 277 miles on the northern boundary, i.e. the 60th parallel. It forms the innermost province of the Dominion, and includes the heart and largest share of the great Prairie Lands.

The population in 1916 was 647,835, showing an increase of 31.6 per cent on the returns for 1911. The increase was chiefly due to immigration between 1911

and 1914. The mass of the population (72 per cent) is concentrated in towns, of which Regina is the largest, with rather over 30,000 inhabitants.

Surface

In general, the province forms an area of rolling prairie, broken by low ridges and valleys. The level nature of the plain is in part due to the horizontal arrangement of the strata, but is more especially due to prolonged cycles of erosion, which have resulted in a marked base-leveling.

This great plain occupies all the north and east of the province, forming a step in the general slope of Canada from the Rocky Mountains in the west towards the Hudson Bay in the east. It is actually intermediate between the plateau area of Alberta, with an average elevation from 2000-3000 ft., and the plains of Manitoba, with heights rarely attaining 1000 ft. The plateau step of the west is extended into Saskatchewan, forming a triangle of high land in the south-western corner, which even rises to 4000 ft., with a well marked edge, as it drops to the plain, known in south as Grand Coteau of Missouri. The plateau is drained north-eastwards by the North and South Saskatchewan Rivers, which flow in wide valleys to the plain, where they have cut cañon-like valleys in the softer strata. In the northern part of Saskatchewan are numerous lakes, many forming small areas of inland drainage. The south-eastern part of the province slopes gradually south and east, and is drained by the Qu'Appelle, Assiniboine, and Souris Rivers. The waterways are navigable for small boats, but, though of very great value in the early days of exploration, colonization, and for fur traders, they have not been developed to any great extent as means of communication at the present day, and have even lost importance. The Saskatchewan and Churchill Rivers were the best known routes.

Climate

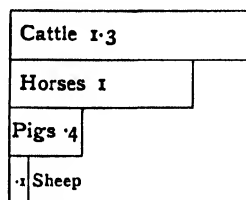
The winters are cold, but dry and clear. The summer temperatures are high in the daytime, and there is abundance of sunshine, the sunshine average being nine hours a day during the summer months. The mean annual rainfall is about 16.7 inches, chiefly in rain, the snowfall being light. The rain occurs mainly in the growing months (May-July), when the temperature is rising. As a rule, snow disappears during March, chiefly owing to the influence of the warm Chinook wind, and agriculture generally recommences in April. In the higher latitudes the presence of forests and large water masses tend to equalize the effects of the more northerly position, while the uniform level of the country is conducive to uniformity of climatic characteristics.

Resources and Industries

The remarkable fertility of the soil, the favourable climate, and the levelness of the country, have contributed to making Saskatchewan one of the best and largest grain-producing areas in the world. The acreage under crops, 17,430,554 acres (1919) is three times as great as the area in Manitoba, and twice as great

as the acreage in Alberta. The high diurnal temperatures, long days, and sufficient rainfall during the growing season are favourable to a most luxuriant growth. Of the total acreage one-half is under wheat, and in 1919 the yield amounted to 117,924,300 bushels, almost entirely of the hard, spring wheat, which makes the finest flour. Oats, barley, and rye are also grown, but the acreage is under a million acres for barley and rye, though the acreage under oats is large, being about 4,800,000 acres, yielding approximately, in 1919, 112,100,000 bushels.

The agricultural belt runs north to about 54° N., but even beyond this there is a considerable area suitable for



Live Stock in Saskatchewan, 1919, in millions

cereal production. Up to the present the lack of transport has retarded development, but the luxuriant growths of hay and grass have led to a beginning in ranching. The growing of roots and vegetables is increasing in the province, but the acreage under roots is still comparatively small. The number of live stock is also increasing, and dairying is being fostered, but the production of butter in 1918 only amounted to about 3,000,000 lb.

Though Saskatchewan is pre-eminently an agricultural province, the acquisition of the northern extension has brought in a considerable area of forest, stretching as far south as Prince Albert and rather farther on the eastern boundary of the province.

The forests have not been fully surveyed, but though they cover a large area, probably only about 20 per cent of the total timber is of commercial value. Of the twenty species found, only four are suitable for the manufacture of lumber. The most valuable species are spruce, poplar, Jack-pine, birch, and balsam. The scrubby forests of the far north are only of use as preserves for game and fur-bearing animals.

The mineral resources of Saskatchewan are limited, but coal deposits—lignite—occur along the Souris River, being especially important near Estevan. Elsewhere, e.g. at Lac la Rouge, deposits are known to exist, but are not yet developed. Other possibilities in Saskatchewan are the development of the fisheries and water-power.

Government

The government of the province is administered by a Lieutenant-Governor and a Legislative Assembly of sixty-two members, elected for five years.

Education

The educational system is thorough and comprehensive; it is supported by Government grants and local taxation,

and includes elementary, secondary, and special schools. In 1907 a university was founded as the University of Saskatchewan.

Religion

Presbyterians and Roman Catholics predominate, though numerous other sects are represented.

BRITISH COLUMBIA

Area and Population

British Columbia is the Pacific province of Canada, and is distinct from all other provinces in the uniformly mountainous character of its relief, its broken coast-line, and its equable climate.

It forms an irregular quadrangle some 700 miles from north to south, with an average width of 400 miles, and a total area of 355,855 sq. miles. It stretches from lat. 49° to 60° N., is bounded on the west by the Pacific Ocean, and on the east by the heights of the Rocky mountains as far north as about 54° N., when the boundaries become arbitrary lines, separating British Columbia from the "Panhandle" region of Alaska on the west and Alberta on the east.

The population in 1911 was 392,480, but has increased. The largest city is Vancouver, with a population of about 100,000; Victoria, the capital, ranks second in size, with 45,000 (1918); New Westminster is third with 15,000. Other cities have under 10,000 inhabitants.

Boundaries and Surface

British Columbia is characteristically a "Pacific" province astride of the mountain system which runs roughly north-west to south-east along the western coast of the continent. The coast is much indented, broken by the long fiords which run far inland, while off shore are numerous islands marking former extensions of the mainland. The largest island is Vancouver Island, in the south-west, cut off from the continent by the narrow straits of Johnstone and Georgia. The large deep inlets on the Pacific form magnificent natural harbours. Esquimalt, the port of Victoria, with easy access to the Comox and Nanaimo coal-fields on Vancouver Island, and protected from the south-westerly gales, practically commands the whole coal trade of the west coast as far south as San Francisco.

Vancouver and Prince Rupert, termini of trans-continental lines, with good harbours, are increasing rapidly in importance as outlets of the vast resources of the interior.

From the coast rise the coast ranges of the continent, forming a watershed drained by short rivers to the Pacific westwards (e.g. Skeena, &c.) and eastwards to the Fraser basin in the south. A series of parallel ranges (Telegraph and Caubon, Gold and Selkirk) and depressions (Fraser, Columbia, &c.) separate the coast range from the main Rocky Mountain system on the eastern boundary.

The mass of the province lies at an elevation from 2000 to 4000 feet, the only lowland below 1000 feet,

occurring in the extreme south-west, in the vicinity of Vancouver.

Though mountainous, British Columbia is not in any sense inaccessible. The highest ranges are broken by passes leading to the interior plateaux, and numerous rivers, east and west, favour communications, while the Fraser River gives an easy line to the south-west.

Climate

The climate is not one of extremes. The prevailing winds are the westerlies, which, having blown over the Pacific, tend to raise the winter temperatures, and, moisture laden, they cause a heavy rainfall as they meet the high mountains along the coasts. The warmth of the winter months is further emphasized owing to the presence of the warm Pacific Drift, which approaches the shores of the province.

Resources and Industries

Though agriculture is being developed in British Columbia, the area under cultivation is very small (some 342,000 acres, in 1919, being the minimum for Canada), and the main resources of the province are essentially its forests, minerals, and fisheries.

The forest area has been estimated as covering over 100,000,000 acres, and contains half the standing timber of the Dominion. The average growth of trees is twice that of other provinces, and includes many valuable species. Though the lumber alone in 1919 amounted to 1,156,636 cubic feet board measure—the maximum for Canada—the vast forest resources are barely touched, and there remain large reserves of “pulpwood” absolutely unexplored.

In point of mineral production British Columbia ranks second for the Dominion. The minerals include deposits of coal, gold, silver, copper, zinc, and lead. The coal measures, mainly bituminous, are estimated as containing 62,000 million tons. The best-worked fields are near Esquimalt and Vancouver. The total mineral production in 1918 was 41,782,474 dollars, copper and coal leading in point of value.

The rivers of British Columbia are famous for their salmon, and canneries are already in existence, but both the water-power and the fisheries along the coastal belt are only in the initial stages of development. The exports of the province consist of minerals (chiefly gold, silver, copper, coal), fish (salmon, halibut, herrings, whale oil), and lumber, furs, and skins.

Government

The province is administered by a Lieutenant-Governor and cabinet with executive power, and an assembly of fifty-eight members with legislative power.

ALBERTA

Area and Population

The area of Alberta is estimated as 255,285 sq. miles, more than double the area of Italy, and more than twenty times the size of Belgium. Alberta extends from lat. 49°

to 60° north, but has a greater width (long. 110° to 120° W.) than Saskatchewan, except in the south, where the western boundary follows the crests of the Rocky Mountains in a south-east direction to the international frontier.

The population in 1916 was 496,525, showing an increase of 100,000 in five years. The populations of the principal cities in 1916 were: Calgary, 56,514; Edmonton, 53,846; and Lethbridge and Medicine Hat with approximately 9000 each.

Surface

The Rocky Mountains along the south-western boundary form a line of high elevation in Alberta. But the Rockies, famous for the beautiful scenery of snow-capped peaks and forested slopes, are broken in three places by well-defined gaps already utilized by railways—the Yellowhead Pass to the north—west of Edmonton; the Central Kicking Horse Pass, west of Calgary; and in the south, the North Kootenay or Crow's Nest Pass, west of Lethbridge. The mountains form a watershed, and numerous rivers drain north-eastwards down the mountain slopes across the plateau (2000 to 3000 feet), which occupies the main extent of the province from the mountains of the south-west to the lower levels of Lake Athabasca and Saskatchewan. Both branches of the Saskatchewan rise in the Rockies, while in the northern section of the province are the Athabasca River and the upper source of the Peace River.

Climate

The climate of Alberta is very similar to that of Saskatchewan, but the influence of the Chinook wind is even more marked, and more than compensates for the higher altitude. The cold air tends to gravitate downward, and the winter temperatures are thus rather higher than might be expected.

Resources and Industries

Until the end of the nineteenth century Alberta was the great ranching province, but since 1900 agriculture

Cattle	1.5
Horses	.8
Pigs	.4
Sheep	.3

Live Stock in Alberta, 1919, in millions

has developed so extensively that at the present day Alberta is pre-eminently an agricultural area. Cattle are still kept, and dairying carried on, but the making of butter and cheese cannot compete with Ontario and Quebec. The area under cultivation in 1919 was 8,170,971 acres, or about one-half the area in Saskatchewan, but greater than in Manitoba. As in the neighbouring province, about one-half of the total acreage is under wheat, and a quarter under oats; in 1919

the acreages were 4,282,503 under wheat, yielding 34,575,000 bushels, and 2,767,000 acres under oats, yielding 65,725,000 bushels. Less than 500,000 acres were under barley and rye, but the production of barley was 10,500,000 bushels, and of rye 1,170,000 bushels. Over 8,000,000 bushels of potatoes were grown. The live stock estimates for 1919 were: cattle, 1,584,000; horses, 800,000; swine, 445,800; sheep, 364,498. The wool clip was estimated at about two million pounds. Mixed farming, combining dairying and the keeping of pigs, is increasing.

Northern Alberta lies within the forest belt of Canada. The forest reserves are estimated as covering 11,881,000 acres, and include spruce, pinewood, cottonwood, and poplar as species of commercial value, but lumbering is little developed. The mineral resources, like the fisheries and forests, are little developed, and will not be developed until the railway system is extended northward. Coal is mined, lignite, bituminous and anthracite coal being found, with a total output in 1917 of 4,863,000 tons. Seams of special value occur near Lethbridge and Banff, and there are immense reserves of coal in the province. The mineral resources in Northern Alberta have not, as yet, been tapped, but are reported to include deposits of gold, copper, iron, oil, natural gases, &c.

Government

The province is administered by a Lieutenant Governor and Cabinet with executive power, while the legislative power is vested in an Assembly composed of fifty-eight members.

Education

There are elementary and secondary schools maintained by Government grants and local taxation. In 1907 a university of Alberta was founded.

YUKON

Yukon and the North-west Territory lie north of 60° N. and east of 141° W., forming the extensive hinterland of the Arctic coast of Canada from Hudson Bay to Alaska. Yukon, as compared with the North-west Territory, is a small area 207,076 sq. miles in extent, with a population of about 8500, chiefly occupied in mining. Dawson is the capital and largest city, with a population of about 3000.

The province lies almost entirely within the mountain belt of the west of the continent, and consists of high plateaux broken by mountain ranges, continuing the Rockies of the south, but tending to change the trend from south-east—north-west to east—west. Eastward the plateau falls steeply to the Peace-Mackenzie basin. The upper course of the great Yukon River drains westward into Alaskan territory, and forms a rich gold-mining area.

The North West Territory is made up of the amalgamated districts formerly known as Keewatin, Rupert's Land, and the North-West Territory, and covers an area of 1,242,224 sq. miles. The population in 1911 was 18,141.

In the west is an extensive lowland area drained by

the Mackenzie River and the two great lakes—Great Slave Lake and Great Bear Lake. This lowland is separated by a low plateau area (running north-west to south-east) from the still lower "barren lands" between the Hudson Bay and Arctic waters.

Climate

The climate of this area approximates to Arctic conditions, the winters being long and severe. In spring the snows thaw, and during the short summers the rivers and lakes are open for navigation.

Yukon is a mining area. Deposits of gold, copper, silver, and coal are worked. The famous gold area is the Klondike district.

There are extensive forests of white and black spruce, balsam, poplar, and birch, but the difficulty of transport and general inaccessibility have prevented the development of lumbering. The country abounds in big game, such as moose, caribou, and bears.

The North-West Territory forms a vast and undeveloped area. It has, however, long been famous as a hunting and trapping ground, and the shores of the Slave and Athabasca Lakes, and especially those of the Bear Lake, are still productive grounds. The beaver, fox, mink, skunk, and musquash supply valuable furs. The lakes also teem with fish. Most of the trapping and hunting, however, is done east of the Mackenzie, where the land is higher, but more marshy and less habitable. Deposits of copper, coal, gypsum, and petroleum are known to exist, but are undeveloped. There are also forests, but these are not of great value. Some land has been cleared, and agriculture begun, but it is still largely in the experimental stage.

NEWFOUNDLAND

The separate colony of Newfoundland includes the island of the same name, and the dreary coast of Labrador from the west end of Belle Isle Strait to Cape Chudleigh, on Hudson Strait. Though this strip of mainland is 750 miles long, and in some parts 300 to 400 miles wide, the population only amounts to 4000. These are all employed in the fish and fur trades, the latter drawing some of its most valuable supplies from Labrador.

The island, which is 42,734 sq. miles in extent, had a population in 1917 of 252,460. By the Peace of Utrecht Great Britain obtained from the French the sole sovereignty of the island, but they reserved the right to catch fish from Cape Bonavista to Point Riche via Belle Isle Strait—a distance of 400 miles. They could even dry the fish so caught on the mainland; but they were not allowed to form any permanent settlements there. In 1904, however, the French renounced these rights, but kept the right to fish in territorial waters from St. John's Cape to Cape Ray for all sorts of fish.

Surface

The Atlantic coast of the island is cut into a number of huge rocky bays and long rugged peninsulas, the

mountains in the south-west rising to 2000 feet close to the sea. Inland the island is traversed by ranges of hills, rising to a height of about 3000 feet, and fully a third of the surface of the interior is covered with lakes and marshes. There is abundance of lower land around the coast, and some of it is arable; but very few important plants will grow except oats.

Climate

Owing to the presence of the sea on every side, the climate is less variable than that of the adjacent mainland. It is, however, a very unpleasant climate, being foggy and inclement, and therefore agriculture is of very little importance.

Resources and Industries

Hay, potatoes, cabbage, turnips, and oats are grown, but the total value of all crops harvested only amounted to about 3 million dollars in 1915.

The mineral resources of Newfoundland are considerable, but not fully developed. Iron-ore has been found on Belle Island and on the east and west coasts. In 1917 the export of iron-ore amounted to 902,380 tons.

Coal has been discovered near St. George's Bay and in the Grand Lake district. Other minerals include copper-ore (Notre Dame Bay), gold, silver, and lead (Placentia Bay).

Pine forests exist in the north of Newfoundland, and saw mills and pulp-mills have been erected. The value of the export in pulp and paper in 1917 amounted to 2,148,000 dollars. The chief industries of the colony are, however, fishing and seal-hunting. South-east of Cape Race the continental shelf continues out into the Atlantic for 300 miles, in many places only 10 fathoms beneath the surface of the ocean. This shelf forms the Great Bank of Newfoundland, over which most of the cod fishery is carried on. The herring fishery is most productive in Fortune Bay, and the salmon on the west of the island. The lobster fishery is also well developed.

The export of dried cod in 1916-7 was valued at 12,876,000 dollars. The cod fishing begins in June and lasts till December. The head-quarters of it are at St. John's, where there is a very curious natural harbour. St. John's is also the head-quarters of the seal-hunting steamers, though the hunting is chiefly confined to Baffin Bay. In 1917 thirteen steamers and about 2000 men were engaged in the seal fishery, and the catch totalled 196,228 seals.

UNITED STATES OF AMERICA

The United States cover an area of 3,574,000 sq. miles, or a little less than that of Canada, but twice as large as European Russia.

Like Canada, the United States span the continent from east to west, and, in the main, have the same broad physical divisions of a high mountain system in the west, a vast central plain, and a low mountain system in the east, falling to a comparatively narrow Atlantic plain and an articulate coast. But the two areas present certain marked contrasts.

Whereas Canada lies wholly in high latitudes, ranging from temperate to Arctic conditions, the United States lie in "middle" latitudes, with conditions ranging from temperate to subtropical. The great climatic differences here implied are further emphasized by the fact that the general slope of the Central Plain in the United States is southwards, and thus it derives maximum benefit from the warmth and moisture carried far to the northward by the winds from the warm "Gulf" region.

This great difference in climatic range is reflected in the different range of products. Whereas the plains of the United States form the famous wheat, maize, and cotton lands, according to the latitudes, and are thus productive throughout, in Canada the rich wheat lands, though extensive, merge finally in the "barren lands" of the north, where the natural resources are exceedingly limited.

The Pacific coasts of the two areas differ, the broken nature of the Canadian "fiord" section presenting a marked contrast to that of the United States. In the east, while most of the Canadian section is closed by ice for several months in the year, the Atlantic coast of the United States is always open. This is partly due to the

influence of the warm Gulf Stream, which issues from the Gulf of Mexico, and, hugging the coast as far as Cape Hatteras, tends to increase the warmth of the Atlantic seaboard, and keeps the harbours ice-free.

The United States may be divided broadly into four large natural divisions, each with its distinctive development and its series of great cities. The divisions may be taken as (1) Atlantic seaboard; (2) Allegheny system—of mountain, valley, and plateau; (3) central plain; and (4) Cordilleran system, consisting of mountain, interior plateaus and basins, and coast ranges.

1. Atlantic Seaboard.—The Atlantic seaboard was the first to be developed. It forms a narrow lowland, broadening southward, flanked by highlands to the west, with an indented coast-line broken by numerous fiords to the north, and a series of long "drowned river valleys" as far south as 36° N. It affords a series of magnificent natural harbours, the foremost of which are Boston, New York, Philadelphia, and Baltimore.

New York is the largest city in America, with a population of rather more than 5,000,000. Since the war it has become the most important port in the world, and transacts about one-half of the total foreign trade for the United States.

Its pre-eminence is largely accounted for (1) by its excellent position for European trade, (2) the advantages of a sheltered and virtually ice-free harbour, with (3) splendid facilities for transport by rail and water with the interior, and (4) easy access to fuel and machinery. Though numerous railways radiate out in all directions and link the city with all parts, the most famous route is by the great "natural highway" formed by the Mohawk-Hudson River. Imports in 1918 amounted to 1,251,790,873

dollars, and the exports (chiefly of grain, flour, cotton, and sugar) to 2,616,850,680 dollars.

Boston (population, 1917, was 767,000) is the great port for the New England States, and is an intellectual, industrial, and distributing centre. It has developed large textile, leather, and paper industries.

Philadelphia is the third largest city in the United States, and has a population of rather over 1,700,000. It is situated at the confluence of the Delaware and Schuylkill Rivers, at the head of ocean navigation, with good communication inland, and full use of the anthracite coal lying along the Schuylkill. It has developed into the foremost industrial city of the United States, leading in the production of all leather goods, but also with important textile (woollen, cotton, and silk) and ship-building industries.

Baltimore (population about 594,600 in 1917) and Norfolk are situated on Chesapeake Bay, and form the centres of the industries based on the fruits, fibres, and especially tobacco, produced in the State, and of the oyster fishery along the coast. Southward as the plain widens, two series of large towns arise—(a) ports along the coasts such as Newbern, Wilmington, and Savannah, which form outlets for the cotton-growing plain, and (b) inland cities situated as a rule at the “fall” line, i.e. where the rivers drop from the foot-hills of the Appalachians to the smooth plain. Such towns—e.g. Richmond, Raleigh, Columbia, and Augusta—have the advantage of water-power, and have developed as local manufacturing centres, chiefly of cotton goods.

2 The Appalachian System. The Allegheny Mountains are rich in minerals, and are well forested. Through the centre of the system runs a valley (known under different names in different parts), which has fertile soil, and easy access to the mineral resources, and is dotted with a series of cities such as Reading, Harrisburg, Staunton, Knoxville, Chattanooga, and in the extreme south the rapidly developing industrial centre of Birmingham, with access to iron and coal for manufacture—especially cotton goods.

The plateau region of the system has a dense population especially concentrated in the great mining and manufacturing towns of Pennsylvania. Chief among these is **Pittsburg**, with a population (1917) of 586,000. With abundance of soft coal Pittsburg has become the great iron centre of the United States. The local iron is obtained chiefly from the Cornwall deposit, but also from the Adirondacks region.

Buffalo (population in 1917 about 475,000) is the most easterly port on Lake Erie, and the terminus of the Erie Canal, and thus controls the trade between New York and the Great Lakes. It also controls the railway traffic on the south of the St. Lawrence. It has easy access to the coal and iron of Pennsylvania, and the water-power of Niagara, and is a rapidly rising industrial centre.

3. The Central Plain forms a vast agricultural area with varying products according to latitude and climate, but with developing industrial centres, especially in the north, where there is easiest access to the minerals of the Alleghenies and the west, and good rail and water communications. The Plain has two great natural highways of trade, north by way of the Great Lakes, and south by the Mississippi to the Gulf.

Chicago is one of the most extraordinary cities of the world. In 1830 it was a hamlet of seventy people, and though burnt down in 1871, has sprung up, and now ranks as the second city of the United States, with a population of about 2,500,000. Situated at the southern extremity of Lake Michigan, it has a central position with regard to the surrounding wheat and maize “belts”, and with easy access to the lumber, iron, and copper of Michigan; trans-continental railways of the north are forced to converge on it, while its harbour is one of the best equipped in the world. It has developed into one of the world's largest grain, pork, lumber, and cattle markets, with flourishing furniture, canning, leather, and book-printing industries, and large manufactures of railway stock and agricultural implements.

Of the other lake ports Cleveland, Detroit, and Milwaukee are the largest. Through Cleveland (population, 1917, about 692,000) passes most of the lake trade in coal, iron, and oil of Ohio. Detroit (population 619,000 in 1917) is chiefly engaged in “through” traffic on the lakes, but also manufactures railway stock. Milwaukee (population in 1917 about 445,000) has also direct water communication with the Mississippi, and has a large trade in lumber, grain, cattle, and hops. Duluth is very much smaller, the population in 1917 being 97,000; but it commands a heavy large traffic in wheat and iron from central Minnesota, though a large quantity of wheat goes by rail to Minneapolis to be ground.

St. Louis, about half-way between the Rockies and the Atlantic, Lake Superior and the Gulf, is a great collecting and distributing centre. It is about a third of the size of Chicago, is situated a short distance below the confluence of the Mississippi, Missouri, and Illinois, and is the largest inland river port. The chief industries are flour-milling and the manufacture of tobacco.

Cincinnati (population in 1917 of about 414,000), situated near the confluence of the Miami and Ohio, has also risen largely due to facilities for transport; it is a railway centre with large slaughtering and meat and tobacco industries.

In the southern plain, forming the great “cotton belt”, are the series of river ports, e.g. Cairo, Memphis, Vicksburg, and Natchez, but the large export of cotton passes through the three Gulf ports of New Orleans, Mobile, and Galveston.

New Orleans (population in 1917 of 377,000, or rather larger than Bristol) has the most central position, and is, except for Galveston, the leading “cotton” port for the Gulf, but also trades in sugar and rice and tobacco.

Mobile (population, 1917, about 59,000) stands on the estuary of the Alabama, and forms the outlet of the lumber area and of the manufacturing centre of Birmingham.

Galveston, about the same size as Mobile, is the harbour of Texas, and the collecting point for cotton and cattle, and manufactures oil-cake. It is much the most important cotton port in the world.

4. The Cordilleran Section.—Westward from about 100° W. the central lowland rises to the higher plain, beyond which rise the Rockies. These higher plains include many of the chief mining and ranching lands of the United States.

Denver, at the foot of the mountains, is the centre of

Commercial and Statistical Survey

general industry based on the mining of the Rockies and the ranching of the plains. Ores are smelted there, and machinery manufactured; at the same time it is the market for the cattle and agricultural produce. It is served by numerous railways.

Between the Rockies and the Cascade Ranges lie a series of depressions, the most important being (1) the Columbia plateau of the north, (2) the Salt Lake basin. The chief mining centres of this region, rich in gold, silver, and copper, are Butte City (copper), Helena (gold), Cripple Creek, and Leadville (lead). The Columbia and Salt Lake plateaux have been developed as irrigated agricultural areas. Salt Lake City (population about 94,000) is rising as an agricultural and mining centre.

Between the Cascade Mountains and the Coastal Range of the Pacific lie two stretches of low land, the Willamette valley, famous for its wheat and fruits, with its cities of Seattle and Portland, and the Sacramento San Joaquin valley, with its inland centres of Stockton, &c.

Seattle stands on Puget Sound, and controls the fishing industry of the sound and the wheat exports from the east of the State.

Portland stands at the confluence of the Columbia and the Willamette, is the western terminus of a transcontinental railway, and controls the wheat trade of the Columbia valley, the timber trade of the Cascade, and the famous salmon and shipping industries of the State.

The Mediterranean climate of the valley of California is particularly favourable to fruits, and large quantities of grapes and other fruits are produced, as well as wheat and other cereals. Stockton is the inland centre, but San Francisco is the real outlet, and the leading port on the Pacific Coast.

San Francisco (population in 1917 was 471,000) has every facility for trade except coal. It has a safe harbour (though liable to earthquakes), is the objective of railways from the north, east, and south for Pacific trade, and has a large foreign trade with China and Japan. Its industries include flour-milling, brewing, woollen manufactures, shipbuilding, &c.

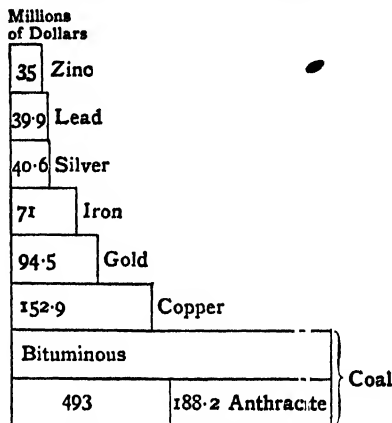
Los Angeles is the largest (population in 1917 was 535,400), though not the leading, port of the Western States. It is also the centre of a wheat-growing area, and oil is being worked in the neighbourhood.

Industries

The United States, industrially, is almost a little world in itself. The variety of relief and climate, of structure and aspect, gives an equal variety of products, including vast supplies of foodstuffs on which a large local population can be maintained. The area makes the country self-sufficient, the number of products which are not found inside it at all being very small; the really vital deficiencies, e.g. rubber and tin, are less than half a dozen.

One result of this self-sufficiency is the relation of the older and newer parts of the country. If we divide the whole area into three great natural regions—(1) a **young Highland Region** in the west, rich in gold and silver; (2) an **old Highland Region** in the east, rich in coal and iron; and (3) a **great Plain** in the centre, producing food-stuffs and other raw materials—it is obvious that

each of these has something to offer the other two, and something to get from them; and under these circumstances the older and newer parts of the area have almost the relations of mother country and colony, the oldest settled parts supplying manufactured goods to the newer parts from which they draw their raw materials.



Mineral Products of United States of America in millions of dollars

The great wealth of coal and iron in accessible places has made the United States the greatest manufacturing nation in the world, and this wealth has been further supplemented by admirable facilities for water-power. Indeed, it was in many cases on water-power that some of the great industries started, though—as in the case of

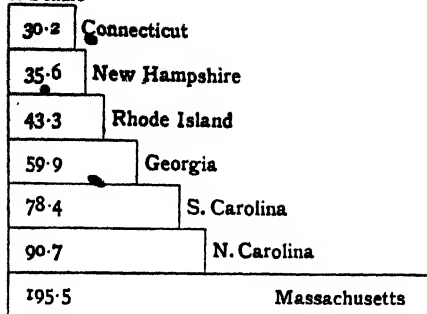
Wisconsin	- 34,076,000 \$
Minnesota	- 33,394,550
Iowa	- 27,028,000
California	- 18,028,000
Ohio	- 14,939,000
Michigan	- 13,479,000
New York	- 12,427,000
Nebraska	- 11,082,000
Kansas	- 9,557,000
Penn.	- 8,620,550

Value in dollars of Butter produced in different States

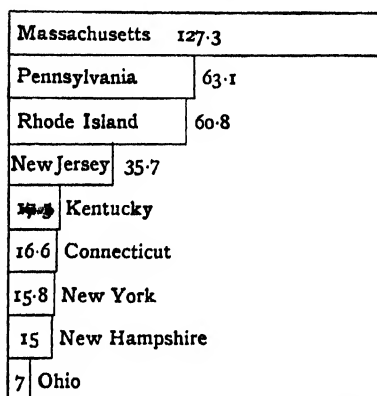
the New England textile industry—they have long outgrown the actual local water-power.

The coal, iron, and water-power have combined to give almost unique facilities for manufacturing on a gigantic scale, i.e. with a minimum of cost; and, though the mass of their output is absorbed by the home population, there

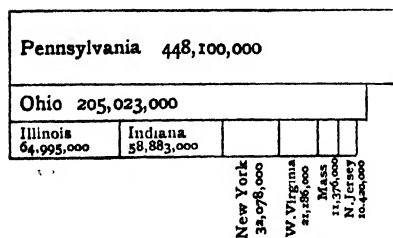
Millions of Dollars



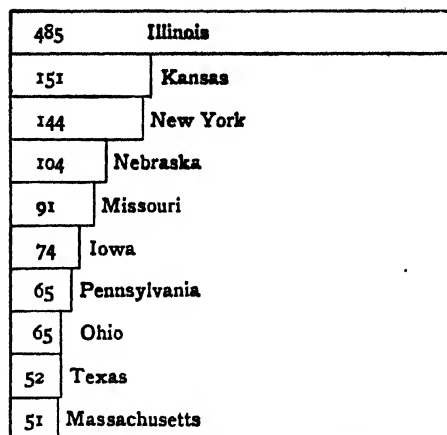
Cotton Goods produced in United States of America in millions of dollars



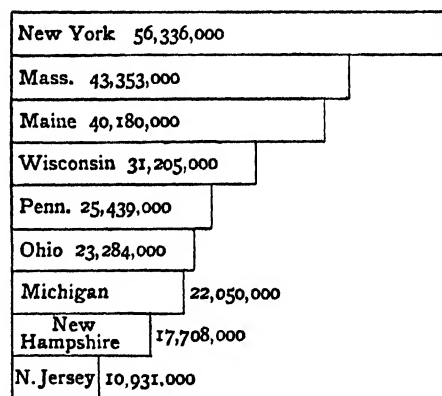
Woolens and Worsted in millions of dollars



Value in dollars of Iron and Steel produced in United States



Meat produced in millions of dollars



Paper and Wood Pulp valued in dollars

education of the population, and the existence of a tariff in protection of home industries.

The most important of the industries, as judged by the number of persons employed in it, is the **textile industry**; but the climate is not very favourable for the finest work. And where the best labour is found, i.e. in **New England**, conditions otherwise are not so favourable as in the **South-Eastern States**, where the air is very humid both in summer and in winter, and where there are local supplies of cotton, coal, and iron, as well as good water-power. No doubt, eventually, the local supplies and the cheaper labour will transfer the mass, at least of the coarse work, to the south-east.

At present **Massachusetts** is the chief textile State, and it has a maximum of advantages round Narragansett Bay in climate, water-power, and access to fuel and machinery as well as imported cotton. **Fall River**, **Lowell**, **Laurence**, **Manchester** are all important. In the south-east the chief centres are **Atlanta** and **Augusta**.

The **woollen industry**, as more essentially a home

is a very considerable surplus available for export. The result of this huge-scale business has been the rise of towns devoted to a single industry, e.g. nearly 90 per cent of all the activities of **East Liverpool** are represented by pottery, and over 85 per cent of all those of **Bethel** by hats.

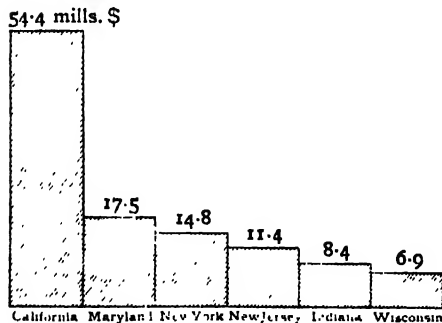
Of course, other causes have contributed to the great development, e.g. large accumulation of capital, the incentive to invention offered by a new and empty land occupied by old and civilized immigrants, the energy and

Penn.	85,253,000
Mass.	45,265,000
Wisconsin	42,204,000
New York	36,018,000
New Jersey	28,652,000
Michigan	25,504,000
Illinois	17,509,000
Ohio	11,628,000
W. Virginia	11,015,000
California	10,021,000

Value in dollars of Leather produced in different States

118	Minnesota
56	Kansas
41	New York
32	Illinois
27	Ohio
25	Missouri
22	Texas
21	Indiana
20	Pennsylvania

Wheat, Flour, and Fruit in millions of dollars



Chief States Canning and Preserving Fruits and Vegetables in millions of dollars

industry to start with, is now less concentrated than the cotton, and **Pennsylvania** has the advantage of local supplies of fine wool, coal, and iron; but, as usual,

skilled labour is a potent factor in the distribution of industries, and a good deal of fine woollen work is done in Massachusetts.

The **silk industry** is also scattered, but was originally dependent to a great extent on Italian labour, and was, therefore, attracted to the great immigrant harbour of

103	Wood & its manufactures
145	Petroleum products
146	Copper manufactures
146	Meat & dairy products
165	Breadstuffs, including wheat
251	Iron & steel manufactures
610	Cotton (raw)

Leading Exports valued in millions of dollars, 1914

New York; and it is still essentially concentrated round the "Pivot Gap" that marks the mouth of the Hudson, especially in **New Jersey**, where **Paterson** and **West Hoboken** are very important.

Iron and steel goods, which employ well over a million hands, are naturally located on the coal-fields, especially

Millions of Dollars	
Wool (unmanuf'd)	53
Fruits - Nuts	53
Vegetable Fibres (unmanuf'd)	54
Wood - manufactures	62
Cotton	70
Rubber (crude)	76
Vegetable Fibres (manufactured)	82
Chemicals - Dyes	88
Silk (unmanufactured)	100
Sugar (raw)	101
Coffee	110
Hides - Skins	120

Leading Imports valued in millions of dollars

where the coal is suitable for coke-making; but the supplies of iron-ore on the chief coal-fields are now more or less exhausted, and much ore is imported at nearly all the centres. **Pennsylvania**, by far the most important coal and coke State, is therefore still the chief iron and steel State, but the ore comes mainly from **Lake Superior**. Three things are typical of the industry: (1) the produc-

tion of automatic machinery with interchangeable parts; (2) the output of locomotives, which is proportionate to the huge distances over which transport is conducted; (3) the output of agricultural implements in the neighbourhood of the vast prairies.

Meat is the most important food industry, based on two geographic areas: (1) the "plains", with their natural pasture below the Rocky Mountains; and (2) the prairies, with their supplies of maize for fattening, especially cattle and pigs. **Omaha** is the most specifically meat centre, but many towns in the Corn Belt are important, and the whole export trade centres on Chicago.

Timber is becoming less important than it was, and the centre of production has moved to the **Southern States**, where both hard and soft timbers are grown. At the same time **Chicago** remains the chief single lumber centre in the whole country, as **Memphis** is in the south. The coniferous forests in the New England States have been largely exhausted, but inertia still keeps in the neighbourhood the more important pulp, paper, and tanning industries.

The **leather** industry is associated specially with the

hemlock tree, whose bark is used in tanning, and **Philadelphia** has the largest leather industry in the world, while **Boston** is the centre of the largest boot-and-shoe industry in the world.

Milling is almost as important as the meat industry, and is certainly far ahead of all other food industries except the meat. It depends on access to wheat, supplies of power, and facilities for transport, and is favoured by a continental climate. Consequently centres with continental climate, water-power, good rail and lake transport are specially favoured, e.g. **Minneapolis**, just below the St. Anthony Falls, on the Mississippi, and on the edge of the hard-wheat belt; and **Rochester**, with the Genesee Falls, on the great through route between Chicago and New York.

There are, of course, various other industries of great importance, e.g. **salmon-tinning** on the Pacific coast; **oyster-tinning** on Chesapeake Bay; **metal industries** on the New England Falls, e.g. at **Waterbury** and **Hartford**; **oil-refineries** in Texas and California; **to-bacco-curing** in Virginia, **sugar-refineries** in Louisiana and California.

MEXICO

Position

Mexico is a federal republic consisting of twenty-eight states, two territories, and one federal district. It lies to the south of North America, between 14° 30' N. and 32° 40' N., and between 85° 45' W. longitude and 117° 5' W. longitude. Mexico is bounded on the south-east by Guatemala and British Honduras, on the north by the United States, on the north-east by the Caribbean Sea and the Gulf of Mexico, and on the south-west by the Pacific Ocean.

The country is shaped like a cornucopia, with the wide side turned towards the United States.

Size and Population

The area of Mexico may be taken roughly at 770,000 sq. miles, or nearly six and a half times the area of the British Isles. Its population was estimated in 1912 at

White 20%	Mestizoes 35%	Indians 45%
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Races in Mexico

15½ millions, and may now be reckoned at a little over 16 millions. The population comprises people of white descent, Indians, and mestizoes or people of mixed race. The following is an estimate of the proportion in which these classes are mixed in the population. The whites form about 20 per cent of the population, the mestizoes about 35 per cent, and the different Indian or native American races about 45 per cent. The natives, it must be understood, are of a great variety of tribes, and have reached very different degrees of civilization: some, like the Seri and Otomi and Tarahimaras, are pure savages; others, like the Tarascans, Aztecs, and

Mayas, had made considerable advances in civilization before the conquest of their country by the Spaniards in 1521. For three hundred years the country submitted to Spain; but in 1810 the tyranny of the Spanish governors provoked a revolt under a priest named Hidalgo, who declared the independence of Mexico. In 1822 General Iturbide had himself proclaimed emperor, but he had to flee in 1824, and then a republic was established. The republic continued till 1864, when the throne of Mexico was offered to the Archduke Maximilian Ferdinand of Austria, who three years later was shot, and Benito Juarez became president. From 1876 to 1911, with the exception of the years 1880 to 1884, General Porfirio Diaz ruled Mexico as president. Since 1911 the Government of Mexico has been in a very unsettled state. President Madero was murdered in 1913, and was succeeded by President Huerta, who resigned in 1914, and was succeeded by General Carranza, who fled in 1920, and after an interval was succeeded by General Alvaro Obregon.

Surface

We may regard Mexico as divided into three parts: a northern and larger part lying between the Isthmus of Tehuantepec and the United States, covering an area of over 600,000 sq. miles; a portion south and east of the isthmus, covering an area of fully 100,000 sq. miles, and forming part of Central America, the continent proper of North America ending at the isthmus; and in the extreme west the peninsula which forms the territory of Lower California, and covers an area of over 50,000 sq. miles. The part north of the isthmus consists essentially of a table-land bounded on the east by the Sierra Madre Oriental, and on the west by the Sierra Madre Occidental. From the isthmus the table-land rises towards the north by a succession of terraces to a

height of between 7000 ft. and 8000 ft. From the lake valley of Mexico the table-land stretches north at an almost uniform level of between 7000 and 8000 ft.

The uniform surface of the table-land is broken in many parts by great fissures or depressions called *barancas*. The Sierras run nearly parallel to the coasts, the eastern at about 10 to 100 miles from the Gulf of Mexico, and the western closer to the Pacific. The Western Sierra is the higher, and reaches a height of from 10,000 ft. to 12,000 ft. The scenery of the western range is striking, and the famous llanos correspond to the natural parks of the Rockies. The eastern scarcely seems to rise above the level of the central plateau, and looks therefore more like an escarpment than a true mountain range. The mountains of Lower California, the Sierra Giganta included, seem a prolongation of the Sierra Nevada of the United States, and reach heights of from 8000 ft. to 10,000 ft.

Volcanoes are the most distinctive mountain forms of Mexico. Most of these are situated on the southern border of the plateau, north of Tehuantepec, and running from east to west as in Central America and the West Indies. There are in all about a dozen volcanoes in Mexico. The highest of these, Orizaba, which reaches a height of 18,250 ft., is, if we exclude Mount St. Elias in Alaska, the culminating point of the North American continent. Other well-known peaks are Popocatepetl (17,500 ft.), Ixtaccihuatl ("White Woman") 16,960 ft., Nevado de Toluca (14,950 ft.), Nevado de Colima (14,100 ft.), &c.

Rivers and Lakes

Mexico suffers from an almost total want of navigable rivers. The longest river in the country, the Rio Bravo (or Rio Grande del Norte), which in part separates Mexico from the United States, is of but little use for navigation. Flowing into the Pacific are the Rio de las Balsas or Zacatula, which rises in the State of Mexico, and after being joined by several large streams reaches the ocean by a broad and deep channel that can be used by boats for a good way up. Midway up the Pacific coast the Rio Grande de Santiago, known in its upper reaches as the Rio Lerma, enters the ocean. It is the second in size of the Mexican rivers, and into it Lake Chapala discharges its surplus water. Into the Gulf of Mexico flows the Rio de Tampico, formed by the junction of the Pánuco and the Montezuma. It has a total course of about 200 miles. Some of the rivers flowing into the Gulf of Mexico reach the sea through lagoons, the San Juan, for example, reaching the sea through the Laguna de Madero. These lagoons seem at one time to have extended along the western and northern coasts of the gulf from the mouth of the Mississippi to Vera Cruz.

The lakes of Mexico are many, but of no great importance. The largest is Lake Chapala, with an area of 1500 sq. miles. Besides Chapala, Lake Cutzeo and Lake Patzcuaro, in the drainage system of the Western Sierras, and the lakes of the valley of the city of Mexico—Chalco, Xochimilco, Texcoco, San Cristóbal, Xaltocán, and Zumpango—are to be remembered. In the plateau there are many small lakes or tarns which have no outlet to the sea.

Climate

Mexico is crossed by the Tropic of Cancer—that is, it lies in the warmer portion of the earth's surface, the tropical and sub-tropical. The climate of places in Mexico is, however, determined rather by their altitude, or height above sea-level, than by their latitude; thus the city of Mexico, which stands at a height of 7400 ft. above sea-level, is cooler in summer and warmer in winter than either New York or Chicago, though these cities are between 1400 and 1500 miles nearer the pole.

With regard to climate, the people of Mexico divide their country into three zones—the lowest the *Tierras Calientes* or hot zone, including the portions of the country less than 3000 ft. above sea-level; the middle zone, the *Tierras Templadas* or temperate zone, embracing all districts between 3000 ft. and 5000 ft. above sea level, with a kind of neutral zone for places between 5000 ft. and 7000 ft. above sea-level, which may, according to circumstances, be classed either as *Tierras Templadas* or *Tierras Frias*. The districts at a height of between 7000 ft. and 9000 ft. are known as the *Tierras Frias*, that is, the cold lands. In reality the climate of the "cold zone" can only be described as temperate, and it includes the best cultivated and most thickly peopled parts of the country.

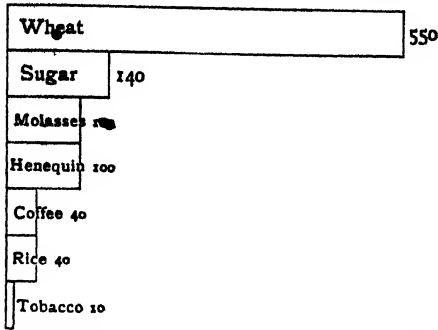
The climate of the *Tierras Templadas* is really like that of Northern Africa, Egypt, and Algiers,—tropical, and oranges, figs, and olives are grown. From 3000 ft. to sea-level the climate is tropical, and torrid heat prevails all along the sandy and marshy coasts of the gulf and of the Pacific. In many of the low-lying coastal regions, where little has been done in the way of drainage, yellow fever and other tropical diseases are rampant; indeed, it may be said that the coasts of Mexico are hot, moist, and generally unhealthy.

To a certain extent the climate is becoming drier and colder. This is said to be due to the continual decrease in the tree-bearing area. Though the rainfall over a great part of the plateau of Mexico does not exceed 25 in., it rises in some parts, as at Monterey, sometimes to 130 in. A considerable part of north-western Mexico, along the east side of the Gulf of California, is a region of low rainfall. This is also the case with the peninsula of Lower California.

Agriculture

The soil of much of the table-land of Mexico is of volcanic origin, and naturally fertile. This, combined with a fairly plentiful rainfall and a warmth due to its position, has given Mexico a variety and an abundance of vegetable productions hardly to be matched in any other part of the earth. Numerous kinds of timber-yielding trees, such as oaks, pines, firs, cedars, rosewood, and mahogany are found; indeed, the Mexican forests near the coast show the grandest sorts of tropical vegetation. Mexico is pre-eminently the home of the cactus; and numerous oil-producing and medicinal plants are natives of the country. Among the chief vegetable productions are coffee, sugar-cane, tobacco, cotton, agave, henequin, cacao, and vanilla. Maize or Indian corn, said to have had its origin in Mexico, is the chief cereal pro-

duced. The quantities of other vegetables produced are estimated as follows: Wheat, 550,000 tons; maize, 60,000 tons; sugar, 140,000 tons; cotton, 80,000 tons;

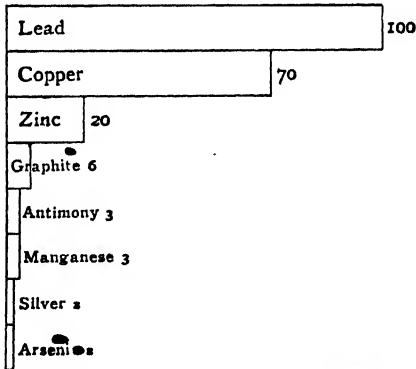


Vegetable Productions of Mexico in thousands of tons

henequin, over 100,000 tons; coffee, 30,000 tons; rice, 40,000 tons; tobacco, 10,000 tons; cacao, 3,000 tons.

Minerals

The mineral wealth of Mexico is immense. Gold- and silver-mines have been worked from the time of the Spanish Conquest. Besides gold and silver Mexico yields lead, copper, zinc, iron, quicksilver, tin, cobalt, antimony, and sulphur. An idea of the relative quantities



Mineral Productions in thousands of tons

of these produced in 1918 will be got from the accompanying diagram.

Besides 2000 tons of silver, Mexico produced in 1918 gold to the value of about 5 million sterling, as well as over 160 tons of mercury and about 15 tons of tin.

Mexico is now one of the great oil-producing regions. The production of petroleum has increased from between 16 and 17 million barrels in 1912 to over 80 million barrels in 1919.

Animals

The animal life in Mexico is very varied. It is really a transition land, and includes forms of life common to

North America and to South America. Among its mammals are included the puma, jaguar, ocelot or tiger-cat, bear, wolf, raccoon, opossum, and deer, the sloth, armadillo, and numerous monkeys. Of serpents, the boa, anaconda, and rattlesnake are encountered, while the iguana or tree lizard, alligator, and crocodile are also met with. There are great numbers of birds of remarkably beautiful plumage. Among these are parrots, toucans, trogons, chattering jays, and humming-birds.

European domestic animals were nearly all introduced into Mexico by the Spanish conquerors, and nearly all thrive well, though in some cases they reverted to the wild state, and the breeds grew smaller. Stock-breeding has, however, now become an important industry on the dry plains of the northern provinces and in the marshy grass-lands of Southern Mexico. The cattle, which have been improved by crossing with English Herefords, and other larger breeds, are mostly sent to Texas, where they are fattened for the British and American markets. The horses have deteriorated more than the cattle, and the sheep have degenerated even more. Poultry, however, thrive well, and abound in the temperate and cold regions.

Manufactures

Mexico produces sugar, rum, molasses, and distilled liquors. It also makes cotton and other textile fabrics, pottery, hats, boots and shoes, and saddlery. There are nearly a thousand tobacco factories in the country, and almost three times as many distilleries. The manufacture of cotton is rapidly becoming an important industry.

Commerce

The ocean trade of Mexico is almost entirely in the hands of foreigners. In order to provide regular communications to the different parts, steamship companies in many cases are assisted by the authorities of the ports. The ports are well served, and there are a large number of foreign steamship companies which give direct communication between the chief ports in Mexico and the chief ports in Europe, the United States, west coast of South America, and Japan. The chief foreign trade of Mexico is with the United States, her nearest neighbour, and Mexico enters more largely into trade with the United States than any other American country does save Canada.

COMMERCE--IMPORTS AND EXPORTS IN MILLIONS OF POUNDS

Imports	£1,000,000.	Exports	£1,000,000.
Vegetable	8	Mineral	42
Manufactured goods	6	Vegetable	25
(textiles)	6	Animal	4
Mineral	4	Manufactures	1
Animal	1		
Machinery	3		
Chemical products	2		
Vehicles	1½		

The chief ports for foreign trade are on the Gulf Coast: Vera Cruz, Tampico, Progreso, Carmen, and

Coatzacoalcas; and on the Pacific Coast: Guaymas, La Paz, Mazatlán, Manzanillo, San Blas, Acapulco, and Salina Cruz. The chief articles of commerce between Great Britain and Mexico in 1918 were: petroleum spirit, of which Britain imported one and a half million pounds' worth; lamp oil, three quarters of a million; lubricating oil, over half a million; and fuel oil, about two hundred thousand pounds' worth. The chief exports from Britain in the same year were: cotton and cotton piece goods, over six hundred thousand pounds' worth; sodium, about a quarter of a million pounds' worth; and machinery, nearly one hundred thousand pounds' worth.

Of exports from Mexico to the United States the chief in value are: gold, silver, lead, and copper, sisal hemp, coffee, tobacco, cattle, hides, and wool. The trade in cattle between Mexico and the United States is a very large one. Mexican cattle are sent largely to Texas to be fattened. The imports from the United States include, besides machinery, raw cotton, cotton goods, iron and steel manufactures and machinery. As will be seen from the table, the imports from the United States amount in value to nearly half the value of the exports to that country.

COMMERCE WITH DIFFERENT COUNTRIES IN
MILLIONS OF POUNDS

Imports from in £1,000,000		Exports to in £1,000,000.	
United States	30	United States	70
Great Britain	2	Chile	1
France	$\frac{1}{2}$	Britain	$\frac{1}{2}$
Spain	$\frac{1}{2}$	Cuba	$\frac{1}{2}$
Guatemala	$\frac{1}{4}$	Spain	$\frac{1}{8}$

Roads and railways connect the principal towns in Mexico with each other; and the chief towns in Mexico are well supplied with tramway lines. Mexico, it must be remembered, is between eight and nine times the size of Great Britain, and, according to the latest estimates, there were in 1920 about 16,000 miles of railway in the country. Railways in Mexico date from 1857, when a concession was granted for the construction of a railway between Mexico City and Vera Cruz; but the period of active railway-making did not begin till Porfirio Diaz became president in 1878. Road-making and railway-making in Mexico is exceedingly difficult on account of the nature of the surface, the terraces and the barrancas, and the want of adequate roads and railways, has, notwithstanding the almost unequalled mineral and vegetable wealth of the country, greatly retarded its development.

In 1909 the chief railways in Mexico were united in one corporation, and were called The National Railways of Mexico. Since 1914 this system, and practically all the private lines, have been taken over and worked by the Government under the name of the Constitutionalist Railway of Mexico.

In December, 1918, there were 110,530 miles of telegraph and telephone lines in Mexico, besides lines belonging to particular states and private individuals amounting to over 5000 miles. In 1919 there were between five and six hundred telegraph offices, twelve telephone offices, and twenty-one wireless stations.

Government

The old constitution of 1857 was abolished in 1917, and a new constitution established. Mexico was then declared a federative republic, consisting of twenty-eight states, two territories, and one federal district. Each state has a right to manage its own local affairs, while the whole country is bound into one by fundamental and constitutional laws.

Of the supreme Government there are three branches, the legislative, the executive, and the judicial. The congress, which consists of a *House of Representatives* and a senate, is the legislative authority. The members of the House of Representatives are chosen for two years by universal suffrage, one member being allotted to every 60,000 inhabitants. The electors must, if married, be eighteen years of age, and if unmarried twenty-one. The Senate consists of fifty-eight members chosen in the same way as the representatives, by universal suffrage. Two are chosen for each state, and the senators must be at least thirty years of age. Senators and members of the House of Representatives are paid at the rate of 7000 dollars (roughly £1500 stg.) a year.

The President is chosen in a general election by the votes of the people, and, according to the constitution, holds office for four years. If the president die, or is deposed, a successor is chosen by Congress acting as an Electoral College. The session of Congress lasts from September 1st to December 31st, and during the recess there is a "Permanent Committee" of fourteen senators and fifteen representatives appointed by the separate houses.

The administration of the affairs of the country is under the direction of the president and a council. It is carried on by seven Secretaries of State (Foreign Affairs, Interior, &c.), and three Departments of State (Judicial, Educational, and Public Health).

Local Government

Each state has a constitution, government, and laws of its own, but though state taxes are levied no state is allowed to impose inter-state custom duties.

In each state there is a governor, a legislature, and judicial officers popularly elected. The Mexican president appoints the governors of the Federal District and the Territories. Each state has its own code of laws, but must at the same time publish and execute laws issued by the Federal Government.

Religion

The people of Mexico are almost all Roman Catholics, but though from the time of the Conquest the Roman Catholic religion was enforced, a great many of the natives are still to be regarded as semi-pagans, who worship in secret the gods of their forefathers, and mingle with the received forms of religion superstitions and practices of pagan origin. For more than two and a half centuries, until it was suppressed in 1820, the Inquisition was exceedingly active in Mexico. During the colonial period the Church acquired great wealth in Mexico, and in 1859 was said to own fully one-third of the real and personal property of the republic. Under the constitution of 1917 the Church is separated from the

State, and all religions are tolerated; but there is one restriction: according to the constitution no ecclesiastical body can acquire landed property. There are in Mexico seven archbishops and twenty-three suffragan bishops, and over the Mexican lower classes the Roman Catholic Church still exercises a boundless influence.

Education

During the Colonial period, the education of the country was entirely under the control of the Church. Primary

education is now free and compulsory; and the authorities of each State regulate and control its education, while that of the Territories and the Federal District is controlled by the National Government. Children are forced to attend school when they are from six to twelve years of age. Preparatory courses for professional training in Government schools are also free and secular. The City of Mexico is the seat of the National University, which was organized in 1910. The primary school arrangements have, since 1912, been extended so as to reach the native population.

BRITISH HONDURAS

Position, Boundaries, &c.

British Honduras is a crown colony on the west side of the Caribbean Sea. It nowhere touches the Republic of Honduras; but has to the north, the west, and the south of it portions of Mexico and Guatemala. The Mexican province of Yucatan lies to the west and north-west, and the Guatemalan province of Yzabel to the west and south. It has an area of 8592 sq. miles, and lies roughly between 15° 58' and 18° 30' N., and between 88° 5' and 90° 5' W. Its population at the beginning of 1919 was between 42,000 and 43,000.

Surface, &c.

The coast is low and swampy, and is cut off from the Caribbean Sea by lines of keys or small islands.

The southern part of the colony, south of the capital district, Belize, is largely occupied by the rugged Cockscomb Hills, which run from south-west to north-east, and reach their greatest height in Mount Victoria. The hills and valleys are densely wooded, and, though there are signs that gold and silver are to be met with, it is probable that these southern valleys will be valued chiefly for their fertility.

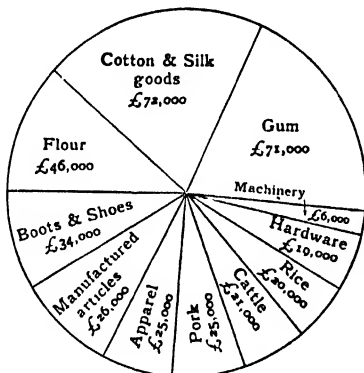
The Belize is the chief river. It takes its name from the capital, which itself is said to have been named from one Wallis, a buccaneer.

Climate and Productions

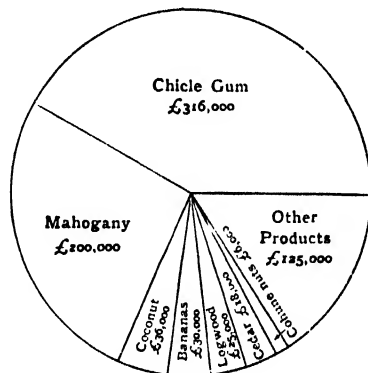
The climate is hot, moist, and unhealthy for white people, though there are few epidemics, and no earthquakes and no hurricanes. The most valuable export in 1918 was chicle gum, though formerly mahogany, log-

wood, and sugar were the chief exports. Almost all tropical products of commercial value may be grown in British Honduras in the same zone.

Maize, rice, bananas, pine-apples, oranges, coffee, cacao, cotton, cassava, rubber, and coco-nuts may frequently be seen growing in British Honduras on the same piece of land. Cacao of good quality grows wild in the woods, and there are grown besides several fibre-producing plants. There are also considerable stretches of land suitable for cattle-rearing and mule-breeding.



Imports into British Honduras, 1918.
Total, £733,620



Exports from British Honduras, 1918.
Total, £755,000

Government, People, &c.

The colony is under a governor and commander-in-chief, who is aided by an executive council of six members, and a legislative council consisting of five official and seven unofficial members. For administrative purposes the colony is divided into six districts: Belize, Corozal, Orange Walk, the Cayo, Staun Creek, and Toledo.

The greater part of the people belong to a distinctly hybrid race, descended from negro slaves, native Indian and white settlers. English common law is in force throughout British Honduras, modified, of course, by local enactments.

Religion

The Roman Catholic, the Anglican, Wesleyan, Baptist, and Presbyterian Churches are all met with in British Honduras, but none of them receives any assistance from public funds.

Education

Of primary schools in 1919 there were over 60, with about 6000 pupils on their rolls. Almost all the schools, primary and secondary alike, are denominational, though only the primary schools receive a Government grant.

GUATEMALA

Position, Boundaries, &c.

Guatemala, one of the six Central American republics, has Mexico to the north-west and north, British Honduras and Honduras Bay to the north-east, Honduras to the south-east, Salvador to the east, and the Pacific to the south-east. Guatemala has an area estimated at 48,290 sq. miles, that is, it is a little smaller than England. It extends from 13° 45' N. to 17° 50' N., and from 88° 15' W. to 92° 12' W. It lies, therefore, entirely within the tropics, and stretches from the Atlantic (Caribbean Sea) to the Pacific, a distance of 280 miles. It is divided into twenty-two departments for administrative purposes, and has a population which now approximates to two millions.

Surface

Guatemala consists chiefly of an elevated plateau with its higher edge turned towards the Pacific, from the shores of which the precipitous southern edge of the plateau runs at a distance of about 60 miles. The entire country, except the marshy forests in the north-east, is mountainous. It is crossed from west to east by the Sierra Madre, while the southern or volcanic chain runs more from west to south-west, and forms the water-parting of the country, which for the most part drains towards the Atlantic.

The streams that flow down the southern edge of the plateau to the Pacific are mere mountain torrents. Of those flowing into the Atlantic the chief are the **Usulutin**, flowing north-west and forming part of the Mexican boundary, and the **Motagua** and **Potocic**, flowing north-east into Honduras Bay.

Seen from the coast, the volcanic cones appear to rise from the central heights of the Sierra Madre. Among the most notable peaks in Guatemala are Tajomulco (13,577 ft.), Santa Maria (12,467 ft.), Atitlan (11,723 ft.), Acatenango (13,615 ft.), and Tacana on the borders of Mexico (13,976 ft.), which is reckoned the highest mountain in Central America. Acatenango shares the claim of Tacana to be the highest Central American peak. Fuego and Agua are also noted peaks over 12,000 ft. high.

There are several extensive lakes in Guatemala, among which may be mentioned Lake Itzal or Peten, Golfo Dulce, near the Atlantic, and Lake Atitlan.

Climate

As in Mexico, the climate is largely determined by height above sea-level, and the zones of climate are described as **Tierras Calientes**, **Tierras Templadas**, and **Tierras Frias**. On the low-lying plains along the sea-coast, and in the low-lying valleys of the plateau the

tropical heat is great, and there malaria prevails. The rainy season lasts from July to October, sometimes to December, and the dry from November to May. The average rainfall is very heavy, especially on the Atlantic coasts. Rain occurs frequently, even in the dry season in some parts.

Agriculture

The soil of Guatemala may be regarded as exceedingly fertile, as nearly all volcanic soils are. On the higher uplands, wheat, barley, and other grains are the chief economic plants grown. Maize, as in Mexico, is grown everywhere, and the sugar-cane is freely cultivated up to 5000 feet. Five thousand feet is also the limit of coffee-growing. Besides maize, sugar, and coffee, indigo, cocoa, cochineal, the cotton used in the country is produced there.

The forests yield many valuable dye-woods and cabinet woods, including mahogany, logwood, and cedar.

Rubber and henequin are also produced.

The chief crop is coffee, of which the quantity produced in 1918 was 110 million pounds. The coffee is grown mainly on the lower slopes of the volcanic hills facing the Pacific. Next to coffee, sugar is the most important commercial crop. The sugar yielded in 1918 amounted to 42,000,000 lb., the maize to 650,000,000 lb., beans to nearly 20,000,000 lb., wheat to 35,000,000 lb., rice to 14,000,000 lb., and potatoes to 35,000,000 lb. There were, in addition, nearly 10,000,000 bunches of plantains and bananas produced. Leaving out maize and bananas, we may represent the agricultural productions in millions of pounds weight as follows:

Coffee	110
Sugar	42
Wheat	35
Potatoes	35
Beans	20
Rice	14

Productions in millions of pounds weight

Fauna

Animal life is comparatively scarce in Guatemala. The only game met with are the red deer, the peccary, and

the wild turkey. The jaguar grows to a large size, but is not at all dangerous. Monkeys are well represented. Snakes are more common on the Pacific side than on the Atlantic, but only the rattlesnake and coral are really venomous, and these are not often met with. The birds include humming-birds, parrots, paroquets, pigeons, tanagers, and toucans.

Minerals

There are silver, gold, copper, iron, and lead mines, but owing to want of means of communication and transport these are little worked.

Inhabitants

Two-thirds of the people of Guatemala are natives, that is, they are what may best be described as American Indians. They were conquered early in the sixteenth century by Alvarado, but their submission was secured really later by Bartholomew de las Casas, the Apostle of the Indians. Besides the Maya-Quiches, who before the appearance of the Spaniards in the New World had made considerable advances in civilization, there is in Guatemala and Salvador an intruding branch of the Aztecs, who style themselves the Pipil (that is superior) nation. The official language is Spanish, but people of pure Spanish descent are comparatively few, and are met with chiefly in the towns. The mestizos, or mixed breeds, who call themselves *Ladinos*, mostly speak Spanish. Of other European races there are not more than twelve thousand in Guatemala in a population of roughly two millions.

There are few large towns, though Guatemala, the capital, is the largest town in Central America, and has a population of close on a hundred thousand. It stands at a height of nearly 5000 feet above sea-level, and is connected by railway with San Jose de Guatemala, a port on the Pacific. Champerico, another port, lies farther to the west, while Livingston is the chief port on the Atlantic coast. Totonicapan, Quezaltanango, and Santa Cruz del Quiché, after the capital, are the largest towns in Guatemala.

Commerce

A few roads and many bridges have been made in Guatemala in recent years; but away from the railway most of the traffic of the country is carried on mule-back. The following table shows the chief imports and exports.

Chief Imports, 1918	£
Cotton	300,000
Foodstuffs	55,000
Linen, hemp, and jute	41,000
Iron and steel	110,000
Paper	32,000
Leather	20,000
Coffee	1,800,000

Chief Exports, 1918.	£
Bananas and plantains...	170,000
Sugar	100,000
Timber	70,000
Rubber	13,000
Hides	7,000

In 1919 the imports from Guatemala into Great Britain amounted to nearly £300,000 worth, and the exports from Great Britain to Guatemala to about £400,000 worth. To the United States the exports from Guatemala were valued at nearly £2,000,000, and the imports from the United States to Guatemala at considerably over a million.

Government

The government of the republic is carried on by a President and a single legislative chamber, the National Assembly. The latter consists of members chosen for four years each (one for every 20,000 inhabitants). The members are chosen by universal suffrage. In addition to the President and the Assembly, there is a Council of State of thirteen members, partly chosen by the National Assembly and partly appointed by the President of the Republic. The executive power is vested in the President, who is chosen for six years, but may not be re-elected for the next term of office. The administration is carried on under the President, assisted by the heads of six departments. Each of the twenty-two departments into which the state is divided is administered by an official appointed by the President, and each is subdivided into municipal districts under *Alcaldes* or mayors assisted by municipal councils, both mayors and councils being chosen by the people.

Religion and Education

The prevailing religion is Roman Catholicism; but there is no State Church, and the Roman Catholic Church is not allowed to establish monasteries or convents. In every other respect all creeds enjoy complete freedom of worship.

Primary education is nominally compulsory, but nine-tenths of the people can neither read nor write. Of Government schools provided and maintained by the State there were in 1917 nearly two thousand, while there are over 100 private schools and secondary schools. For higher instruction there are two institutions, one for men and one for women, at Guatemala, and two similar institutions at each of the two towns, Quezaltanango and Chiquimula. To each of these institutions there is a school for teachers, or normal school, attached. In 1918 the Government issued a decree establishing a university in Guatemala. The university was opened in that year, and its degrees are recognized in all the Central American Republics.

HONDURAS

Position, Boundaries, &c.

Honduras (pron. hon-doo'ras) is a republic of Central America, and lies between $13^{\circ} 10'$ N. and $16^{\circ} 2'$ N., and between 83° W. and 90° W. It has to the north of it the Caribbean Sea and the Gulf of Honduras, to the west of it Guatemala, to the south-west Salvador and Fonseca Bay, and to the south-east Nicaragua. It has an area of 44,275 sq. miles, and a population estimated in 1920 at 620,000, not counting uncivilized Indians. Honduras includes Bay Island, a group of small islands in the Bay of Honduras, comprising *Ratan*, *Bonaca*, *Utila*, *Elena*, *Barbareta*, and *Morel*. The inhabitants of these islands are mostly coloured. They are known as *Sambos*, a name given to people of mixed Indian and negro blood. The *Sambos* are slowly disappearing. The islands were ceded to Honduras by Great Britain, and are practically independent. Many of the inhabitants are Caribs, and use the old Carib speech.

Inhabitants

Three-fourths of the people of Honduras are *Ladinos* or half-castes, of mixed race and Spanish speech. While the greater portion of the people are *Ladinos*, there are parts of the country occupied almost exclusively by native Indian tribes, known under the name of *Xicaques* and *Payas*. In many parts of Honduras the native Indians are known as *Lemas*. Many of them have become Roman Catholics, and live at peace with their neighbours. They till the soil, and are in many ways hard-working labourers. The greater part of the Spanish population of Honduras, the *Ladinos*, live on the Pacific slope, while the Atlantic slope is either uninhabited or is occupied by Indian tribes of which the number is unknown. The natives are mostly of *Maya-Quiché* or "*Toltec*," stock, and there are many remains which show what considerable advances the natives had made in civilization before the time of the Spanish Conquest, which began in 1524, in obedience to the orders of Hernando Cortes.

Surface

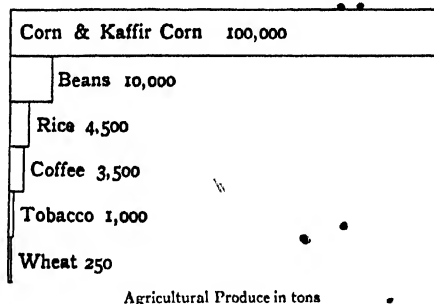
Honduras is a mountainous country, crossed by many parallel ridges which run mainly in an eastern and western direction, enclosing intercommunicating plains and elevated plateaux. The volcanic range, continued through Guatemala and Salvador, does not in Honduras come within 60 miles of the Pacific Coast. Viewed from the Pacific, it appears, notwithstanding, like a great natural wall, with many volcanic peaks rising over it, and a range of lower hills between it and the ocean. The volcanic range on the north reaches its greatest height in *Congrehoy*, which rises to a height of 8030 ft. A younger volcanic range in the south rises to a height of 9200 ft. in *Cerro de Selaque*.

The eastern and western running heights are interrupted by the great plain of *Comayagua*. The plain is crossed

by two river valleys, the *Humuya* and the *Goascoran*. The *Humuya* flows almost due north into the Atlantic, and the *Goascoran* due south into the Pacific. The streams are not of much use for navigation, being badly obstructed by rapids. Part of the northern coast is very low, and is densely covered with heavy woods, but farther east the land is higher, and the hills come almost to the coast. Lake *Yojoa*, in the west of Honduras, is the largest lake. It is 25 miles long by 8 broad. The Gulf of Fonseca has many small islands in it, and on one of these, *Tigré*, is *Amapala*, the only seaport of Honduras on the Pacific. The Bay of Fonseca is a flooded depression, nowhere more than 60 ft. or 10 fathoms deep, and so shallow in general that it is navigable only by sea-going vessels of light draught.

Climate, Agricultural Productions

Though within little more than ten degrees of the Equator, Honduras has everywhere a comparatively temperate climate, except on the low-lying, moist coast lands, where the heat is excessive and the climate unhealthy.



This is due to the fact that the average height of the surface of Honduras is over 3000 feet, so, as in elevated tropical tracts elsewhere, the climate is one of the healthiest and most enjoyable in the world. On the low-lying Atlantic seaboard the rainfall is on an average more than 100 inches a year, and the temperature seldom falls below 70° F. Here are grown the valuable timbers, mahogany, rosewood, and cedar, the medicinal plants, such as sarsaparilla and ipecacuanha, and the dyes such as indigo, which Honduras exports.

The plains of *Comayagua* and *Olancho* supply, with their succulent grasses, excellent pasturage for the numerous herds of cattle for which Honduras is justly celebrated, for cattle-breeding is carried on extensively in Honduras, and dairy farming on a smaller scale. There are fully half a million head of cattle in the republic. Bananas are cultivated on the Atlantic coast, as are also coco-nuts. Coffee of very good quality is produced. Maize is grown near the coasts on the low grounds, and wheat and other grains in the higher districts. Excellent

tobacco is grown. Nearly 2,000,000 lb. annually are produced. The diagram shows the weight of the vegetable productions raised.

Mineral

In its mineral wealth Honduras takes the first place among the States of Central America. It has mines of gold, silver, lead, copper, zinc, iron, and antimony. Lignite and Coal have been found, but lack of roads and of other means of communication have hitherto greatly retarded the progress of the country in this as in other directions.

Manufactures

The manufactures of Honduras, besides brick-making and the distillation of spirits, include straw-plaiting and the production of very good hats, as well as cigar manufactures and the manufacture of soap, candles, and shoes.

Communications and Commerce

Throughout the country there is a great lack of good means of communication. Tegucigalpa, the capital, is connected with other towns by fairly well-made roads, but these are not kept in repair, though improvements in road-making and repairing are beginning to be made. There is a railway, 69 miles long, from Puerto Cortez to Portico, and some miles of railway have been made from Vera Cruz, to aid, like the longer line, in the transport of bananas. In 1919 there were in Honduras between six and seven hundred miles of telephone lines, and between four and five thousand miles of telegraph.

Honduras exports, chiefly to the United States, bananas, coco-nuts, coffee, hides, rubber, cattle, mahogany, and sugar.

Government

The constitution of Honduras has been again and again remodelled and recast since 1839. A new charter was last proclaimed in 1894. This charter gives the power of law-making to a congress of deputies, chosen for four years by popular vote. There is one deputy for every 10,000 inhabitants. The congress meets on the 1st of January, and sits for sixty consecutive days. The

executive authority is in the hands of a president, who is chosen by popular vote. He remains in office for four years, and is eligible for a second but not for a third term of office. The president is assisted by a council of five ministers, to whom are entrusted the control of foreign relations, government and justice, treasury and public credit, public works and agriculture and instruction. For local administration the country is divided into sixteen departments. The highest judicial power is invested in a supreme court, consisting of five judges chosen by popular vote.

Topography

The present capital of Honduras is Tegucigalpa. It was chosen for capital in 1880, but even in the eighteenth century it rivalled the former capital Comayagua. It was the chief centre of a very important mining district.

Mining has of late been revived, and Tegucigalpa is joined to its suburb Conception by a stone bridge of ten arches, which spans here the upper Choluteca. Tegucigalpa has a population of between thirty and forty thousand. Among other important towns are Juticalpa, with a population about half that of Tegucigalpa; Comayagua, the former capital, with a population of about 8000; and the seaports of Amajala (4000), Trujillo (4000), and Puerto Cortez (2500).

Religion

The great bulk of the people are Roman Catholics, but complete liberty is granted to all religious bodies, and no Church is supported by state funds or receives any other privilege.

Education

Education is free, secular, and compulsory between the ages of seven and fifteen. There are primary schools in every convenient centre, but the percentage of illiterates, especially among the Indians, is very high. There are nearly a thousand schools with over one thousand two hundred teachers, and about a hundred thousand children of school age, of whom about one-third are in attendance. There is a central university and a central institute at Tegucigalpa.

SALVADOR

Position, Boundaries, &c.

Salvador, a republic of Central America, is bounded on the north by Honduras, north-west by Guatemala from which it is separated by the Rio Paz, on the south by the Pacific, and in the east by Fonseca Bay, which divides Salvador from Nicaragua. It forms an irregular quadrilateral with an area of a little over 8000 sq. miles, that is, it is about the same size as Wales. It is, therefore, the smallest of the Central American republics; but it has a population which in 1919 was estimated at 1,300,000. Salvador, therefore, though the smallest, is

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second in population among the states of Central America. It has about twice as many inhabitants as Nicaragua or Honduras, and about three times as many as Costa Rica or Panama.

Surface

The coast-line of Salvador stretches for about 200 miles along the Pacific, and is deeply indented especially in the south-east where there are several good harbours. Along the coast, and for about fifteen miles inland, the surface is low and level. At that distance from the sea it is crossed by the volcanic range, a continuation of the vol-

canic mountains of Guatemala. In the chain there are a number of extinct, quiescent, or active volcanoes; but none of them rise to a height of more than 8000 ft. Between the Volcanic (*Madre del Volcan*) and the Surras which run between Salvador and Honduras is the plateau which comprises the greater part of the country. Of volcanoes, the best known is **Izalco**, *The Lighthouse of Salvador*. Like Jorullo it is of quite recent origin, having suddenly made its appearance 150 years ago. Among other volcanic peaks may be mentioned **Santa Ana**, **Quezaltepeque**, and **San Miguel**. Earthquakes are frequent, as lately as June, 1917, an earthquake did great damage to the capital, **San Salvador**, a town of 70,000 inhabitants, and in addition partially destroyed the towns of **Nejapa**, **Quezaltepeque**, and **Armenia**. A still more violent earthquake laid waste the city of San Salvador in April, 1919.

The largest river is the **Lempa**, which forms part of the boundary between Salvador and Honduras. It comes from *Lake Guyar* on the Guatemalan border. *Lake Ilopango*, near San Salvador, is 9 miles long and 3 broad. The Rivers Paz and San Miguel are the next in size to the Lempa.

Climate, Soil, &c.

The climate of Salvador is like the climate of Guatemala, tropical, very warm, very moist, and arranged in zones according to altitude. Owing to local causes there are differences by which the tropical heats in the different zones are modified. The coastal districts and the low-lying valleys of the central plateau are the least healthy parts of Salvador. The rainy season is from May to September, and the dry from October to April; but downpours occur even during the dry season.

The soil is largely volcanic, and is exceedingly fertile, and most of the people of Salvador are engaged in agriculture. Many medicinal plants, balsams especially, are natives of the country. Indigo, for which formerly Salvador was famous, is scarcely now grown; but the Government is encouraging cotton-growing by means of bounties on exports. Coffee is now the chief production. Cheese, cacao, rubber, tobacco, and sugar are also produced, and efforts are being made to grow wheat. Rice and other cereals also are cultivated.

Minerals

Gold, silver, copper, mercury, and lead have been found chiefly in the east of Salvador. Coal has been discovered in various parts of the valley of the Lempa. Mining operations are growing in importance, though gold and silver are as yet the chief productions.

Commerce

The trade of Salvador is mainly with the United States and Great Britain. The country imports chiefly cotton goods, woollen goods, hardware, machinery, flour, drugs, and chemical products. Its chief exports are coffee,

36,000 tons valued at nearly £4,000,000, and indigo, 250 tons, valued at over a quarter of a million sterling. Besides these, Salvador exports silver, balsam, hemp, hides, rubber, and henequin. The exports to Salvador from Great Britain were in 1919 more than a quarter of a million, while the imports from Salvador into the United Kingdom amounted in value to little more than £50,000.

People

The people, who number about 1½ millions, are chiefly of mixed race, calling themselves *Ladinos*. The Mestizoes or Ladinos form about three-fourths of the entire population, and are of Spanish speech. Of the remaining fourth the great bulk are Aborigines, and include the Pipils, who are of the Aztec stock like those of Guatemala. Pure Europeans of different nationalities are said to number between twenty and thirty thousand, and there is also a distinct negro strain in the population.

Government

In Salvador, the legislative authority belongs to a chamber of 70 deputies, of whom 42 are landowners, that is three landowners are sent from each of the fourteen departments. The deputies are chosen by universal suffrage, and for one year only, so that the people of Salvador are nearly always busy with elections. The President is chosen for four years, and under him the affairs of the country are carried on by a ministry of four members. The four members are: (1) The Minister of Foreign Affairs, Justice, Charities, and Instruction; (2) The Minister of War and Marine; (3) Interior, Government, and Agriculture; (4) Finance and Public Credit. The President cannot be chosen as President or as Vice-President for the next term. Local government is carried on in each of the fourteen departments by officials appointed by the Central Government, and the affairs of the municipalities are managed by officials chosen by the people.

Religion

Most of the people of the republic are Roman Catholics; but there is complete religious freedom and toleration. There is an archbishop, and there are two bishops, the Archbishop of San Salvador, and the Bishops of Santa Ana and of San Miguel. Civil marriage is legal. There are no monasteries and no convents, and education is in the hands of the laity.

Education

Primary education is free and compulsory, and there are about 1000 primary schools in Salvador with some 1500 teachers, and about 60,000 pupils. There are besides about thirty higher schools (including two normal and three technical schools) with close on 3000 pupils, and a National University with faculties of Law, Medicine, Pharmacy, and Dentistry.

NICARAGUA

• Position, Boundaries, &c.

Nicaragua is a republic of Central America, and is bounded on the north by Honduras, on the east by the Caribbean Sea, on the south by Costa Rica, and on the west by the Pacific Ocean. Among the Central American republics it stands next in size to Guatemala, having an area of a little more than 49,000 sq. miles, or about a thousand square miles less than England. The frontier which separates Nicaragua from Honduras runs across Central America from west-south-west to east-north-east. The country is shaped like a slightly irregular equilateral triangle, with one side stretching along the Caribbean Sea from Cape Gracias a Dios to the mouth of the San Juan, a distance of 280 miles, and the opposite vertex clearly marked by the Coseguina volcano on the south side of Fonseca Bay. From Fonseca Bay the boundary with Honduras runs generally north-eastward to a point on the east coast a little above Cape Gracias a Dios. The boundary towards Costa Rica is drawn 2 miles south of the San Juan River and Lake Nicaragua, till it reaches a point opposite the centre of the western shore of that lake, and thence it is continued south-westward to the most northerly headland at Salinas Bay on the Pacific.

Surface

On the west a series of volcanic peaks run nearly parallel to the coast and at no great distance from it. These are practically a continuation of the Salvador system, and consist for the most part of a series of isolated peaks, with Coseguina on Fonseca Bay in the extreme north. Among the other peaks that lie between Fonseca Bay and Lake Managua may be mentioned El Viejo (5840 ft.), Santa Clara, Telica, and Momotombo (4127 ft.). Farther south are Masaya and Mombacho, while on the Island of Ometepe in Lake Nicaragua are the twin peaks Ometepe (5643 ft.) and Madera. North-east of the volcanic range is the great depression in which lie the Lakes Managua and Nicaragua, the former discharging into the latter.

Managua has a length of about 30 miles, and a total area of nearly 600 sq. miles. Nicaragua, on the other hand, has a length of 100 miles, and a maximum breadth of 45 miles, so that its area is close on 3000 sq. miles.

To the east of the depression rises the Cordillera de Los Andes, with a maximum height of 7000 ft., flanking the plateaux which slope gradually from the main Cordillera to the Caribbean Sea. The name was given to this chain from a mistaken idea that it was connected with the mountains of the west of South America, though, of course, there is no such connection. The surface of the plateau has been cut by the rivers that flowed east into deep fissures, which alternate with high plateau ridges and isolated hills. Numerous rivers cross the plateau, the chief of them being the *Segovia*, which forms a portion of the boundary between Honduras and Nicaragua. Other important streams flowing east into the

Caribbean are the Hueso, Rio Grande, Bluefield, and Rama. The San Juan from Lake Nicaragua is, however, the only river that is of much importance for navigation. The San Juan and Lake Nicaragua have long been considered with regard to the construction of an inter-ocean canal between *Greytown* on the Caribbean and *Brito* on the Pacific.

The Mosquito coast along the Caribbean Sea, from about 11° 45' N. to 14° 10' N., has a length of about 225 miles, and stretches inland for about 45 miles. It was not till the seventeenth and eighteenth centuries that its wide lagoons and the difficult channels through which they were reached drew to it the buccaneers by whom it was much used. The English made their first settlement there in 1630, and the coast takes its name from the chief Carib tribe found there at the time.

In 1850 Great Britain concluded a treaty with Nicaragua, the *Treaty of Comayagua*, which ceded to Honduras without reserve her rights on the Mosquito coast. It was not, however, till 1894 that the territory, as the department of Zelaya, was formally recognized as a part of Nicaragua.

Climate

The mean altitude of Nicaragua is between 2000 ft. and 3000 ft. above sea-level, so that the greater part of the country enjoys a fairly mild climate, not unhealthy for Europeans or unfit for European settlement. On the lower grounds, however, the climate is tropical, with a wet season lasting from May to November on the Pacific slope, and from June to December on the Atlantic, and a dry season lasting throughout the winter. The average temperature throughout the year is 80° F., falling to 70° at night, and rising to 90° at noon in summer. Nicaragua is a monsoon land, and lies in the region swept by the moist north-east monsoon, which blows steadily from the Caribbean, and is scarcely interrupted till it reaches the Cordillera de Los Andes and the higher volcanic peaks to the west of the lacustrine depression. There the rainfall is heavy, amounting to 102 inches annually at Rivas. At Greytown, on the Caribbean, observations have shown the average temperature to lie between 89° F. in September and 70° F. in January, and the average rainfall to be nearly 300 inches. Earthquakes are not infrequent, especially along the Pacific slope, though in Nicaragua they are less violent than elsewhere in Central America. To whatever causes it may be due, Nicaragua as a whole has a healthy climate. Even the low-lying Mosquito coast region is not unhealthy, and no actual case of yellow fever has ever been reported on it.

Agriculture, &c.

Each of the three zones in Nicaragua has its special products. These, however, overlap in many cases. The farming, timber, and mining industries are the chief sources of wealth. Bananas are the principal agricultural

production of the eastern portion of Nicaragua. Coconuts also are grown, as are plantains, oranges, pineapples, and other tropical fruits. Rice is grown only to a small extent, while some wheat is raised in the hilly Nueva Segovia district.

The agricultural productions of Western Nicaragua are much more varied, the chief being coffee, sugar-cane, cacao, and corn. Of coffee the amount annually produced is said to average 23,000,000 lb., or 10,000 tons roughly.

The eastern portion of Nicaragua gets most of its food from the United States, but the western produces most of its own food, indeed it exports small quantities of beans, corn, cheese, and lard to the neighbouring republics. From the forests mahogany, cedar, and other woods are exported, rubber is collected, and dyewoods, gums, and medicinal plants are got. Of economic animals, horned cattle are by far the most important, and there are in Nicaragua over a million and a quarter of these. Dairy farming, the production of butter and cheese, are increasingly important, and horses and pigs are raised but not sheep. Gold-mining is carried on along the Caribbean, and copper, coal, petroleum, silver, and precious stones have also been found. The mineral resources of Nicaragua are still as yet only very slightly developed, though they are supposed to be considerable.

The forests are infested by the jaguar, puma, and ocelot. Alligators swarm in the lakes and rivers, while a kind of freshwater shark is met with in Lake Nicaragua.

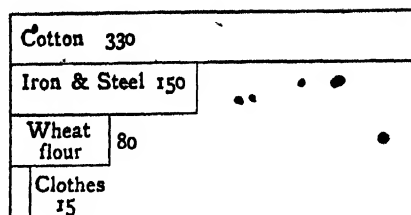
Vultures, toucans, and humming-birds are abundant; and among Nicaraguan snakes are the python, coral, and rattlesnake.

People, &c.

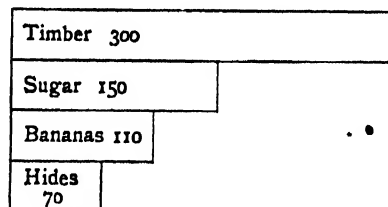
The people of the western part of Nicaragua are mostly of mixed Spanish and Indian blood, with an interfusion of negro blood derived from the slaves imported into the country during the colonial period. Scattered over the country and forming only a comparatively small per cent of the population are the "Bravos" or native wild Indians. Of the eastern part of the country the population is made up of Mosquito and Zambo Indians and of Negroes. Most of the native dialects have ceased to exist; but a corrupt form of English is spoken on parts of the Mosquito coast. Those who speak Spanish form the bulk of the population, and are known as Ladinos.

Commerce

There are few good roads in the country, and the Pacific Railroad of Nicaragua, of a total length of 170 miles, is the only railroad in the country. The trade is chiefly with the United States, with Great Britain, and with the neighbouring republics. The imports consist chiefly of cotton, iron and steel, wheat, flour, and clothing, as shown in the accompanying diagram. The



Value of Imports in thousands of pounds



Value of Exports in thousands of pounds

exports consists chiefly of timber, sugar, bananas, hides, and skins of the value shown in diagram.

Government

The constitution of Nicaragua is that which came into operation in April, 1913. It gives the legislative power to a congress of two houses, the lower consisting of 40 deputies, elected for four years by universal suffrage, and the upper consisting of 13 senators, elected for six years. The President is chosen for four years, and governs the country through a council of responsible ministers, made up of the heads of the departments of: Foreign Affairs and Public Instruction; Finance; Interior, Justice, and Police; War and Marine; Public Works.

All able-bodied citizens between seventeen and fifty-five are either in the army, where they are compelled to serve one year, or in the reserve.

Religion

The great bulk of the people are Roman Catholics; but all religions are tolerated, and none receives any endowment, or any other special privilege from the State. There is a Roman Catholic Archbishop of Managua, and three Roman Catholic bishoprics, the bishoprics of Leon, Granada, and Matagalpa.

Education

Elementary education is free and compulsory, and there are close on 400 elementary schools. Secondary education is neither free nor compulsory, but is carried on by private individuals. Nicaragua has three universities, one in each of the cities of Managua, Leon, and Granada; besides, there are a number of State normal schools throughout the country.

COSTA RICA

Position. &c.

Costa Rica, *Rich Coast* (so called on account of its supposed wealth), is next to Salvador the smallest of the Central American Republics. It has to the north-west of it Nicaragua, from which it is partly separated by the River San Juan, to the north-east of it the Caribbean Sea, to the south-east the Republic of Panama, and to the south and west the Pacific Ocean. It lies between lat. 8° N. and 11° 13' N., and long. 82° 50' W. and 85° 56' W. It has an area of 23,000 sq. miles, is divided into seven provinces, and has a population estimated at nearly half a million.

Coast

The Pacific coast is broken by two large gulfs, the Gulf of Nicoya, and the Gulf of Dulce. The Gulf of Nicoya, which is famous for its purple-yielding murex and for its pearls, is a shallow land-locked inlet with numerous richly-wooded islets; while the Gulf of Dulce has an average depth of 100 fathoms, and its surface is unbroken by an island. The Atlantic coast, in contrast with the Pacific, is unbroken by any large inlet or estuary. Costa Rica is bordered along the coast by low-lying marshes and lagoons. Between these occur stretches of rich soil or desolate tracts of sand.

Surface

Costa Rica may be described as a high tableland crossed from north-west to south-east by lofty mountain ridges, the most important of which run through the entire length of the country about midway between the two oceans. This range has an average elevation of more than 6000 ft., but above it rise at intervals lofty volcanic cones which in some cases reach a height of between eleven and twelve thousand feet. The central mountains, which are of very old granite and igneous rock, have on their flanks lower ridges of younger secondary or tertiary rock which also rise up in mountain ridges. From these rise a number of volcanic cones, some active, and some dormant. Among these may be noted, Orosi, Rincon de la Vieja, and Irazu or Cartago. The last rises to a height of 11,200 ft., and its summit commands a view of both oceans. The only important Costa-Rican streams are the Reventazon and the Tarcoles, which flow in opposite directions through the Col d'Ochomopo, the former into the Atlantic, and the latter into the Pacific.

Climate

The climate of Costa Rica lying between the two great oceans, the Atlantic and the Pacific, is essentially insular. With the exception of the low-lying coast lands where the heat, though modified by the nearness to the sea, is tropical, the climate of Costa Rica is free from excessive heat or excessive cold, and marked chiefly by the difference

between the dry season and the wet. The climate varies with the height; and here, as elsewhere in Central America, three zones are recognized—tropical, temperate, and cold. The mean annual temperature in most of the inhabited upland districts is about 70° F., that is 10° less than it is on the coasts. There is a rainfall of 100 to 130 in. on the eastern or Atlantic slopes, and there we have a rich forest region yielding mahogany, brazil wood, cedar, evergreen oak, and ebony. On the Pacific side grassy savannas take the place of the forests.

Agriculture

The rich grasses of the Pacific side of the uplands are suitable for cattle, and the rich volcanic soil of the San José and Cartago uplands are exceedingly well suited for the cultivation of tropical fruits and plants. The principal production are coffee, of which over 30,000,000 lb. weight were exported in 1918, and bananas of which about 9 million bunches are exported annually. Bee-keeping has been introduced, and will likely become a thriving industry. Maize, sugarcane, rice, and potatoes are cultivated, tobacco is grown, and there are nearly half a million cattle, besides horses, pigs, sheep, and goats.

Mineral

Next to agriculture, the most important industry is mining. Gold and silver are mined mainly on the Pacific slope, and copper, nickel, iron, lead, mercury, and coal are also met with.

Animals

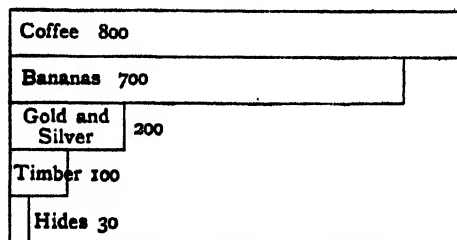
Costa Rica is specially rich in birds and reptiles. Of Costa-Rican birds ornithologists enumerate more than twice the number of species to be met with in the whole of Europe. The seas and gulfs of Costa Rica are well-supplied with fish and other animal forms, amongst them the valuable pearl and mother-of-pearl oysters, and the purple-yielding murex of the Gulf of Nicoya. Among the monkeys of Costa Rica the most interesting is a white-faced monkey which has often been met with wearing a red passion flower in each ear as a decoration.

People

The bulk of the people of Costa Rica are Ladinos, that is, they are of Spanish speech and of mixed race. They seem a more peace-loving and steady-going people than most of the other Central American communities, though they have recently been at war with their neighbours of Panama. The population of pure European descent, mostly Spanish, dwell chiefly round San José the capital of the country, and in the towns of Cartago, Alajuela, Heredia, Liberia, Punta Arenas, and Limón. On the banana farms there are some 20,000 British West Indians employed.

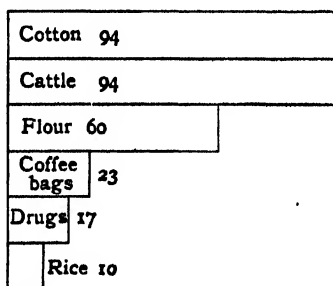
Commerce

The total length of railway open in Costa Rica is over 400 miles. San José, the capital is connected by railway



Exports in thousands of pounds sterling

with Port Limon on the Caribbean and Punta Arenas on the Gulf of Nicoya. In 1916 a road for motor traffic was



Imports in thousands of pounds sterling

built between San José and Heredia. There are about 2000 miles of telegraph lines and nearly a thousand of telephone lines. Vessels of a tonnage of nearly half a

million enter and clear annually from ports in Costa Rica. The annual imports into Costa Rica may be taken in round numbers as worth one million sterling, and the exports as worth twice as much. While the United States takes 90 per cent of the exports and sends nearly 60 per cent of the imports, Great Britain sends 8 per cent of the imports and receives only 2 per cent of the exports. The accompanying diagrams will give an idea of the relative value of the various articles imported and exported.

Government

In accordance with the Costa Rican Constitution of 1918 the legislative authority belongs to a chamber of representatives consisting of 43 deputies, chosen by universal manhood suffrage for a term of four years, half retiring every two years. The executive authority is in the hands of a President chosen for four years. He and the Vice-President are selected by an electoral college made up of senators and deputies. Affairs are administered by six Secretaries of State, appointed by the President and responsible to him.

Religion and Education

The religion of Costa Rica is Roman Catholicism; but under the Constitution there is complete religious freedom. Elementary education is free and compulsory, the elementary schools being provided and kept up by local councils, while the Government pays the teachers, and also gives grants in aid of local funds. Provision is also made for secondary education both of boys and girls, and Cartago, Alajuela, and Heredia have each a college, while the latter has also a Normal School. There is in addition a Medical Faculty and Schools of Law, Pharmacy, and Dentistry.

PANAMA

Position, Boundaries, &c.

Panama, a former department of Columbia, declared its independence in 1903; and this was recognized by Columbia in 1914. It lies between 7° 15' N. and 9° N., and between long. 77° 15' W. and long. 82° 30' W. It is bounded on the north by the Caribbean Sea, and on the south by the Pacific Ocean. On the west it is bounded by the Republic of Costa Rica, and on the east by the Republic of Columbia. Its extreme length is about 350 miles, the same as England, its breadth varies from 30 to 120 miles, or much the same as Scotland, and its area is about 32,000 sq. miles, or almost the same size as Ireland.

Surface

Panama is a hilly or rather a mountainous country, with a chain of mountains, the Sierra de Panama, running through

the eastern portion of it, and reaching a height of about 3000 ft. In the western part there are two ranges, the Sierra de Chiriqui and the Cordillera de Veragueta. On these there rise a number of lofty volcanoes, which reach in the Volcano of Chiriqui a height of 11,970 ft., and in Mount Santiago a height of 9275 ft. These mountain chains are by no means continuous, but are broken by low passes; sometimes not more than 300 ft. above sea-level. Indeed the configuration of the country and the character of the rocks of which much of it is built up seem to show that Panama, like other parts of Central America, consisted of a series of islands with channels between them opening from the Atlantic into the Pacific.

Rivers and Lakes, &c.

The rivers of Panama are some of them of considerable length, but none of them are of much use for navigation,

and during the rainy season they become raging torrents. The best known of the Panama rivers are the **Chagres**, which falls into the Caribbean near Colon, and the **Bayano**, which falls into the Pacific. The Panama Canal, which was made available for commercial shipping on 15th August, 1914, belongs to and is completely under the control of the United States of America, which controls also the Canal zone, a ten-mile strip of territory running from the Caribbean to the Pacific through the middle of which runs the Panama Canal. For these rights the United States paid to Panama a sum of between two and three million sterling, and in addition pays an annual rental of between fifty and sixty thousand pounds. Panama has no lakes except the artificial lakes, **Bobio** or **Gatun** and **Sosa** (or **Miraflores**) of the Canal zone. The best known of the Panama rivers, the **Chagres**, rises near the Pacific and flows first south-west and then north to the Caribbean. It is little more than 100 miles long, and drains about 1000 sq. miles; but it varies greatly in depth, and is very difficult of control. The length of the Canal from deep water in the Caribbean to deep water in the Pacific is roughly 48 miles.

Climate

The climate is tropical, and the temperature varies little throughout the State, though the Caribbean Coast is a degree or two warmer than the Pacific Coast. The mean average temperature is 79°·1; but at Panama the average is 80°·6. The rainy season lasts from April to December, and the dry season, during which the north-east wind prevails, lasts from January to the end of March. The rainfall is comparatively evenly distributed. At Colon, on the Caribbean, it varies from 85 to 155 in. annually, and at places in the interior it varies from 75 to 140 in., while at Panama, on the south coast, it varies from 47 to 90 in.

Productions

The soil is fertile, but only a very small part of it is under cultivation. Bananas are grown on nearly half the cultivated area, especially in the north-west, and are the most important production. After bananas, coffee, cacao, sugar, tobacco, and cereals are the largest crop. About 130 tons of caoutchouc are collected annually by the natives of the Cordilleras, or is got from trees planted by Europeans near the coast. Vegetable dye-stuffs, many medicinal plants, such as sarsaparilla, Copaiba, and ipecacuanha, cabinet and building woods are produced. Cattle-rearing is carried on, and hides are exported. Copper has been found, and gold is mined to a small extent. There are valuable deposits of coal near **Bocos del Toro**, and important salt-mines near **Agua Dulce**.

Commerce

The chief ports are **Colon**, **Panama**, and **Bocos del**

Toro. A railway, 47 miles long, joins the ports of **Colon** and **Panama**. It belongs to the United States Government. The United Fruit Company (America) owns about 140 miles of track with branches, and other lines have of late been constructed. Excluding the Canal zone the imports may roughly be estimated at 2 millions annually, and the exports at about 1½ millions.

Of the total imports fully 60 per cent come from the United States, about 7 per cent from the United Kingdom, about 3 per cent from China, and between 2 and 3 per cent from Japan. The chief import from the United Kingdom into Panama was formerly textiles.

People and Provinces

The estimated population of Panama is fully half a million. The people are of mixed race, and include Spanish, Indian, and negro elements. There are besides a few immigrants from the United States and from Europe, and a few Chinese. There are between fifty and sixty thousand British subjects from the West Indies settled in Panama. The country is divided into eight provinces, and has for its capital **Panama** on the Pacific Coast, a place of over 60,000 inhabitants. The next most important town is **Colon** on the Atlantic Coast, with a population of about 30,000. In the same province as **Colon** is **Porto Bello**, formerly an important commercial city, and **Chagres**. Not far from Panama, and like it in the Canal zone, are the towns **Balbao** and **Ancon**. **Agua Dulce**, formerly **Trinidad**, is the centre of the salt industry, and **Bocos del Toro** of the banana trade. Other important places **Ciudad de David**, **Los Santos**, **Las Tablas**, and **Pese**.

Government

The Republic is ruled by a Chamber of Deputies of thirty-three members (one for every 10,000 inhabitants), and by a President, who must at least be thirty-five years old. The President is chosen by direct vote, and holds office for four years, but cannot be elected for the succeeding term. After 1924 the elections of deputies are to be held every four years. There are three Vice-Presidents, and a ministry of five members.

Religion and Education

Roman Catholicism is the religion of the country, but other denominations have a fair following. Protestantism prevails chiefly in the Canal Zone.

All children are compelled to attend school between the ages of seven and fifteen. The Government maintains about 400 elementary schools, in which between twenty and thirty thousand pupils receive free education. A university has recently been opened, and many young men and young women are being educated in Europe at the expense of the Panama Government.

BERMUDAS

Position, &c.

The Bermudas are a group of islands in the North Atlantic, about 580 miles east of North Carolina, and 590 east by south from Cape Hatteras. There are said to be in all about 360 islets, of which only six are of any importance. These six are *Bermuda*, *Somerset*, *Ireland*, *St. George*, *St. David*, and *Boaz*. The total area of the group is said to be about 20 miles. Though a British colony the Bermudas are a favourable winter resort of people of the United States, who are said to flock hither annually to the number of between twenty and thirty thousand. Sometimes the islands are called Somers Islands, from Sir George Somers, who was shipwrecked among them early in the seventeenth century (1611). They are the "still vex'd Bermoothes" of Shakespeare's *Tempest*. The islands were for a time used as a convict settlement, but are now used chiefly as a naval station and dockyard.

Surface, &c.

The islands are of coral formation, and rise but little above the level of the sea. Their highest point is only 260 ft. above sea-level. The soil is of a curious red earth, and is generally mixed with vegetable matter and with coral sand. There are neither springs nor freshwater streams in the Bermudas, and only a few wells of brackish water. The people of the islands are therefore entirely dependent on the rain-water which they collect and preserve in tanks.

Climate, &c.

The climate is mild and healthy, delightful in fact. The mean winter temperature is 62·6°, and the mean summer 80·4°, while the thermometer never rises above 86°. The Bermudas, in fact, may be said to enjoy a perpetual spring, which clothes the fields in never-fading

verdure. The Bermudas cedar, a kind of juniper which supplies timber for small vessels, is the chief kind of tree. The shores are fringed with the mangroves, and the prickly pear grows luxuriantly in the most barren districts.

Almost every kind of fruit and vegetable grows freely in the Bermudas. The arrowroot of the islands is said to be superior to that produced elsewhere. The citron, sour orange, lemon, and lime grow wild, and the loquat, which has been introduced from China, thrives well. The mild climate aids the growth of edible plants and roots, and potatoes, tomatoes, and onions are grown largely for export. Medicinal plants are cultivated, and coffee, indigo, cotton, and tobacco are grown.

Bermuda is an important naval base, with a dockyard and a victualling establishment.

Commerce

The principal exports are arrowroot, potatoes, tomatoes, and onions which are shipped mainly to the United States. The Bermudas send also to the States lily bulbs and various kinds of garden vegetables. The imports into the Bermudas from the United States are more than double in value of the imports from Canada, and roughly ten times the value of the imports from the United Kingdom. The exports of the Bermudas go almost entirely to the United States, from which Bermuda gets most of her food-supplies.

Government

The Government consists of a *Governor*, assisted by an *Executive Council* of seven members appointed, a *Legislative Council* of nine members also appointed by the Crown, and a *Representative House of Assembly* of thirty-six members. The capital of the Bermudas is *Hamilton* on Long Island or Bermuda. The only other town is *St. George* on the island of the same name.

